



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

JUN 28 2011

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

Mr. Robert G. Gorham  
Division Chief  
Office of the State Fire Marshal  
Pipeline Safety Division  
Department of Forestry and Fire Protection  
3950 Paramount Boulevard, #210  
Lakewood, California 90712

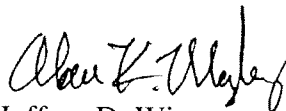
Dear Mr. Gorham:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has reviewed your letter of April 25, 2011, notifying us that the California Office of the State Fire Marshal (CSFM), proposes to grant NuStar Energy (NuStar) a waiver from 49 CFR 195.306(b)(1). NuStar requested that CSFM modify compliance with 49 CFR 195.306(b)(1) as adopted by the State of California pursuant to Section 51011 of the California Code, and allow NuStar to test its P-25 and P-28 product lines using high flash jet fuel and high flash diesel fuel as the test medium.

PHMSA does not object to the proposed waiver by CSFM to NuStar based on the conditions specified by CSFM in the April 25, 2011 letter and attachments. This proposed waiver by the CSFM would allow NuStar to use high flash jet diesel and high flash diesel fuel as the test medium for approximately 0.50 miles each of 8-inch Line P-25, and 12-inch Line P-28 pipelines located in Contra Costa County, CA.

My staff would be pleased to discuss this decision or any other pipeline safety matter with you. John Gale, Director, Standards and Rulemaking Division, 202-366-4959, may be contacted on regulatory matters and Jeffery Gilliam, Director, Engineering and Research Division, 202-366-0568, may be contacted on technical matters specific to this decision.

Sincerely,

  
for: Jeffrey D. Wiese  
Associate Administrator for Pipeline Safety

MAY 02 2011



DEPARTMENT OF FORESTRY AND FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
Pipeline Safety Division

3950 Paramount Blvd., Suite 210  
LAKEWOOD, CA 90712  
(562) 497-9100  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)



**CERTIFIED MAIL - RETURNED RECEIPT REQUESTED**

April 25, 2011

Mr. Jeffrey Wiese  
Associate Administrator for Pipeline Safety  
U.S. Department of Transportation  
PHMSA - East Building, 2<sup>nd</sup> Floor  
1200 New Jersey Avenue, SE E24-455  
Washington, D.C. 20590

Dear Mr. Wiese:

**Subject: Request for waiver from Part 195.306 (b) (1) – test medium**

Operator: NuStar Energy – OPINS# 31454  
90 San Pablo Avenue  
Crockett, CA 94525  
(510) 787-1076

Pipelines: CSFM # 0973 8-inch "P-25" Refined Products Line (0.50 mi)  
CSFM # 0974 12-inch "P-28" Refined Products Line (0.50 mi)

The above operator has requested a waiver from 49 CFR 195.306 (b) (1) for testing their P-25 and P-28 refined product lines using high flash jet fuel and high flash diesel fuel as the test medium. The two pipelines are intrastate pipelines and are located in Contra Costa County, California. The pipeline safety regulations in 49 CFR 195.306 (b) (1) allow for testing with liquid petroleum the does not vaporize rapidly if the entire pipeline section under test is outside of cities and other populated area. The two pipelines originate at the NuStar Terminal and travel 0.50 mile to the ConocoPhillips Refinery in Rodeo. At that location, P-25 ties into the Kinder Morgan "Concord" pipeline while the P-28 pipeline ties into the Kinder Morgan "Richmond" pipeline.

The pipeline operator is requesting to test with product because that would eliminate the risk of contaminating the federal government jet fuel system, minimizes down time, and eliminates the cost of storage, treatment, and disposal of contaminated test water.

CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN

PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT [WWW.CA.GOV](http://WWW.CA.GOV).

Mr. Jeffrey Wiese  
April 25, 2011  
Page Two

California law requires each intrastate pipeline to be pressure tested every five years for four hours at 125% of MOP. It also gives the State Fire Marshal authority to authorize the use of liquid petroleum having a minimum flash point of 140 degrees Fahrenheit (high flash) as the test medium.

These two pipelines have always been pressure tested using water, but four other NuStar pipelines at this terminal have been tested, more than once, using diesel and jet fuel without incident.

A waiver is needed since Section 195.452, Pipeline Integrity Management, requires the testing to be conducted per Subpart E, which prohibits testing with product in cities and populated areas. All other conditions under Section 195.306 (b) will be met.

Please refer to the attachments for operating and line specifications.

I find that the proposed waiver is consistent with pipeline safety and is justified. Subject to your approval, the Office of the State Fire Marshal proposes to grant NuStar Energy a waiver from compliance with 49 CFR Part 195.306 (b)(1) to take effect approximately July 1, 2011.

Sincerely,



Robert Gorham  
Division Chief

cc: Mr. Chris Hoidal, Chief  
U.S. Department of Transportation  
Office of Pipeline Safety, Western Region  
12300 W. Dakota Avenue, Suite 110  
Lakewood, Colorado 80228

Attachments:  
Draft letter to NuStar Energy granting approval of waiver  
Activity Report  
CSFM Product Test Waiver Checklist



DEPARTMENT OF FORESTRY AND FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
Pipeline Safety Division

3950 Paramount Blvd., Suite 210  
LAKEWOOD, CA 90712  
(562) 497-9100  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)



Mr. Mike MacDonald  
Terminal Manager  
NuStar Energy  
90 San Pablo Avenue  
Crockett, California 94525

**RE: WAIVER REQUEST TO USE LIQUID PETROLEUM AS TEST MEDIUM  
P-25, CSFM #0973; P-28, CSFM #0974**

Dear Mr. McDonald:

We have reviewed your January 24, 2011 request to use high flash jet fuel and high flash diesel as the test medium for pressure testing the above listed pipelines. As a general policy, we do not advocate testing pipeline systems with petroleum products. However, under special circumstances, pressure testing with a medium other than water is approved when using water is not feasible or when it creates significant hardship and/or operational problems. California Government Code Section 51014 (a) gives the State Fire Marshal authority to authorize the use of liquid petroleum having a flashpoint over 140 degrees Fahrenheit as the test medium.

Your request is granted under the following conditions:

1. A testing procedure should be developed and available for review.
2. The test medium shall be high flash jet fuel and high flash diesel fuel (flashpoint > 140 degrees Fahrenheit).
3. The Fire Department having jurisdiction must be notified at least three days in advance of the test.
4. During the test, communication must be maintained along the entire pipeline route by mobile telephone or radio.
5. Sufficient equipment (e.g. vacuum trucks, etc.) must be on standby in the event that they are needed should a rupture occur.

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PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT [WWW.CA.GOV](http://WWW.CA.GOV).

Mr. Mike McDonald  
April 7, 2011  
Page 2

Please notify our office in Lakewood by phoning (562) 497-9100 as soon as you have a confirmed test date and to obtain a CSFM test I.D. for the test. If you have any questions, please contact Supervising Pipeline Safety Engineer, Linda Zigler at (650) 400-6533.

Sincerely,

ROBERT G. GORHAM  
Division Chief

REC'D JAN 26 2011



January 24, 2011

Chief Gorham  
Cal Fire/ California State Fire Marshal  
Pipeline Safety Division  
3950 Paramount Boulevard  
Lakewood, Ca. 90712

**Re: Test Medium Waiver – CSFM line's ID #'s 0973 (Kinder Morgan Concord Line) and #0974 (Kinder Morgan Richmond Line @ Shore Terminals – Selby)**

Dear Chief Gorham,

NuStar Energy requests the use of high flash Diesel and high flash JP-5 Jet Fuel as the test mediums during the next scheduled certification of lines ID #'s 0973 and 0974. These are the 8" Shore Terminals to Kinder Morgan Concord Pipeline and the 12" Shore Terminals to/from Kinder Morgan Richmond Pipeline. These lines transport gasoline, diesel, and jet fuel. The lines are approximately 2,640 feet in length and run through a rural area. Lines #0973 and #0974 were built in 1981. There have never been any leaks on any of the lines and they were last successfully tested on 07/11/06.

The pressure tests would be conducted during daylight hours only after the notification of local and industry fire protection. NuStar will provide OSRO and a vacuum truck provider would also be on standby alert. Both the Diesel and the JP-5 jet fuel used for the test would have a flash point greater than 140 F.

Using JP-5 and Diesel for the tests, instead of water, is greatly desirable because it eliminates the risk of contaminating the government jet fuel system, it expedites the test procedure which minimizes the pipeline downtime and it prevents the generation of approximately 4,000 barrels of water which would be very costly and burdensome for NuStar-Selby to treat and dispose of given limited available tankage for water and water treatment systems.

Thank you for your assistance in this matter and if you have any question please feel to contact me at your convenience.

Sincerely,

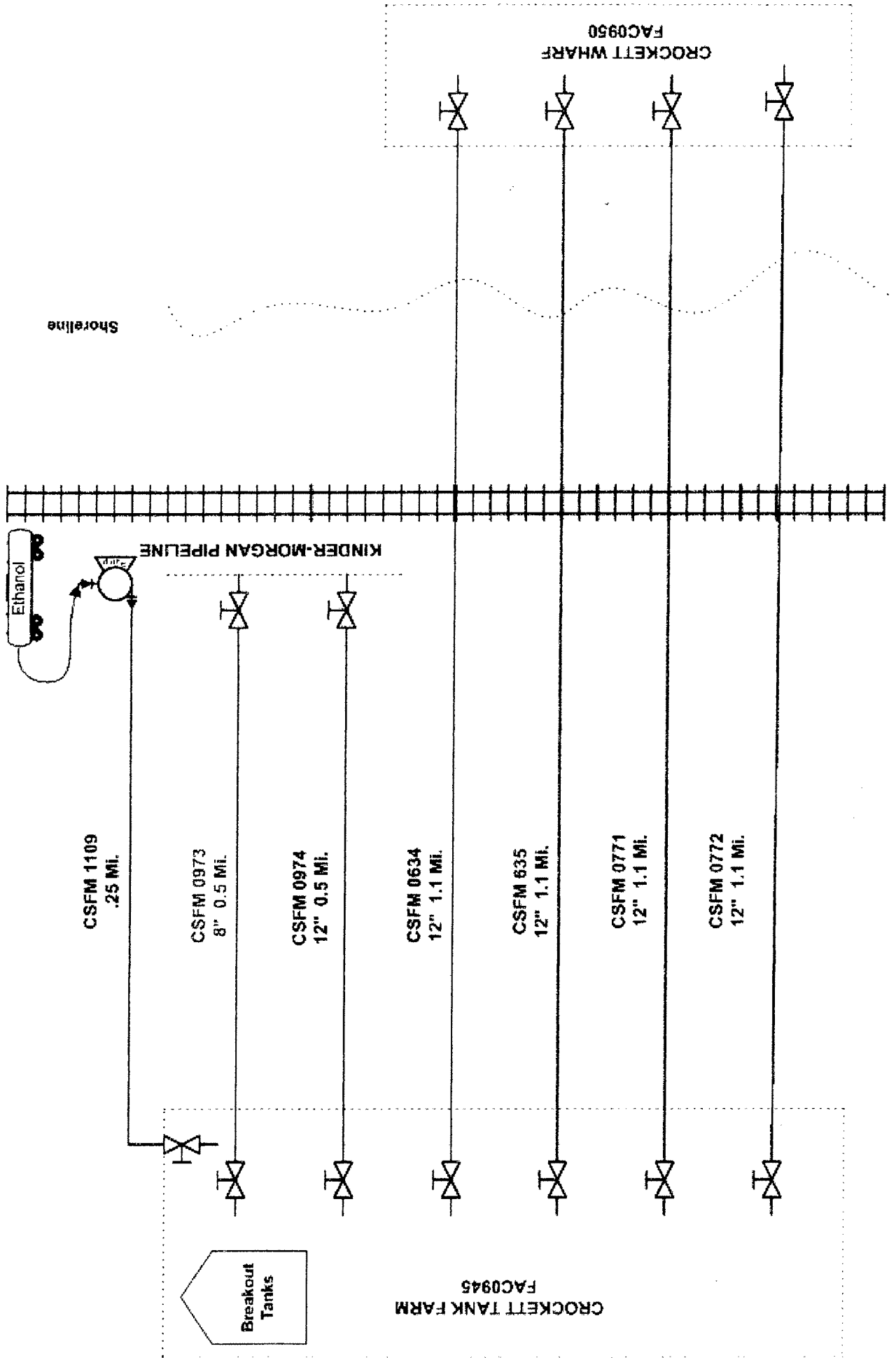
A handwritten signature in cursive script that reads "Michael McDonald".

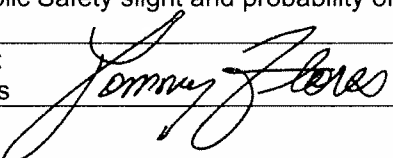
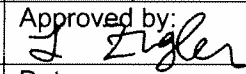
Michael McDonald  
90 San Pablo Avenue  
Crockett, Ca. 94525  
510-787-1076  
713-562-7018  
[Mike.McDonald@nustarenergy.com](mailto:Mike.McDonald@nustarenergy.com)  
Cc: Linda Zigler

1/26/11 Sent to CA

**New Star  
Crockett  
I.U. 0875A**

EKC 07-29-98  
Rev. 02-18-03  
Rev 02-28-03  
Rev. 03-18-03



Pipeline Operator NuStar Energy, Crockett, Ca.	CSFM Line No. #0973 & #0974	
Inspection Unit #0875A	Date: 03/11/2011	
Product High Flash JP-5 Jet Fuel	Flashpoint 140* F/ 60* C	
Reason Given for Requesting Product Test:	Check Box Below	Initial If OK
Economics of disposing of contaminated water.	X	T.F.
Creation of hazardous waste, environmental concerns.	X	T.F.
Difficult to remove all of the water from a JP-5 jet fuel pipeline.	X	T.F.
Water shortage, drought	N/A	T.F.
Significant operational difficulties Other: Limited available tankage and not cost effective to use water as a test medium.	X	T.F.
Location of Pipeline 10%Urban 90%Rural	X	T.F.
Any special concerns? Yes, The ConocoPhillips assembly building. (Refer to narrative report for additional information)	X	T.F.
Recommend test to conducted on:	Weekday Weekend Doesn't Matter	
NuStar Energy will conduct the hydrostatic pressure test during the weekday and daylight hours.	X	T.F.
High risk line? Not on the CSFM high risk pipeline list.	X	T.F.
Number of leaks since last test: None	X	T.F.
Last Test Date: July 11, 2006 Product used: Water	X	T.F.
Test pressure: CSFM #0973: 1,500 psig. CSFM #0974: 600 psig.	X	T.F.
Less than 20% of SYMS: Yes IDP: CSFM #0973 = 1,753 psig	Cathodic Protection? Yes CSFM #0974 = 1,778 psig	X
Recommend Testing in segments? No, each line is only 0.50 miles in overall length.	X	T.F.
Test procedure reviewed? Yes	X	T.F.
Was pipeline route inspected for unusual conditions? Yes	X	T.F.
List special conditions or exemptions: None	X	T.F.
Is Risk to Public Safety slight and probability of injury or damage remote? Yes	X	T.F.
Submitted by: Tommy Flores 	Approved by: 	
Date: April 7, 2011	Date: 4-7-2011	



# 0913  
0914



OFFICE OF THE STATE FIRE MARSHAL  
Pipeline Safety Division  
P.O. Box 944240  
Sacramento, CA 94244-2460  
Tel. (916) 445-8477

### ACTIVITY REPORT

Print Date: 03/14/2011

Activity Control #: 20110311TAF1

Page: 1

Activity Control #: 20110311TAF1

From: 03/11/2011

To: 03/11/2011

Submitted by: Tommy Flores

Activity Days: 03/11/2011 (1Day)

Activity Type:	Person Days	Category	Year	Person Days
<input type="checkbox"/> Standard Inspection	.....			<input type="checkbox"/> Specialized Inspection
<input type="checkbox"/> Inspection Integration	.....			<input type="checkbox"/> Training Received
<input type="checkbox"/> Damage Prevention	.....			<input type="checkbox"/> Training Delivered
<input type="checkbox"/> Construction	.....			<input type="checkbox"/> Meeting
<input type="checkbox"/> OQ	.....			<input type="checkbox"/> Hydrostatic testing
<input type="checkbox"/> O&M/Drug/Alcohol	.....			<input type="checkbox"/> Investigation
<input checked="" type="checkbox"/> IMP	..... 1.000	Hydro		<input type="checkbox"/> Follow-up Inspection
<input type="checkbox"/> Fish & Game	— hrs.—> 0.000			<input type="checkbox"/> Local Assistance

Add. Engineer(s):

(There are NO records for this State)

Contact:

Name: Michael McDonald	Phone #: (510)787-1076	Ext.: _____
Title: Terminal Manager	Fax #: ( )__-__	
Agency: NuStar Energy, Selby	Mobile #: ( )__-__	
Email:	Pager #: ( )__-__	
Name: Curtis Shorts	Phone #: (510)787-1076	Ext.: 120__
Title: Lead Maintenance Technician	Fax #: ( )__-__	
Agency: NuStar Energy, Selby	Mobile #: ( )__-__	
Email:	Pager #: ( )__-__	

INSP #:

0875A	NuStar LP Pipeline & Terminal - Crockett
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Employee Signature:

*Tommy Flores*

Date:

04/07/2011

Supervisor's Signature:

*Linda Ziegler*

Date:

4-7-2011

<u>Line ID #:</u>	LineID#: 0973 KM Concord Line Lat From: Lat To: Notes: Long From: Long To: TB Page: TB Section: TB County: LineID#: 0974 KM Richmond Lat From: Lat To: Notes: Long From: Long To: TB Page: TB Section: TB County:
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Facility: FAC0945 NuStar - Selby Terminal

Brea/Out Tank: (There are NO records for this State)

Construction: (There are NO records for this State.)

Investigation: (There are NO record for this State.)

Hydrostatic Test: (There are NO record for this State.)

Training/Meeting: (There are NO record for this State.)

Local Assistance: (There are NO record for this State.)

O&M/Drug: (There are NO record for this State.)

Violation: (There are NO record for yhis State.)

**ACTIVITY REPORT-NARRATIVE  
NUSTAR ENERGY, SELBY TERMINAL  
TEST MEDIUM WAIVER MEETING  
20110311TAF1**

On January 24, 2011 NuStar Energy Terminal Manager Michael McDonald submitted a Hydrostatic Test Medium Waiver request for CSFM #0973 (8 inch P-25 Kinder Morgan Concord line) and CSFM #0974 (12 inch P-28 Kinder Morgan Richmond line) hazardous liquid petroleum pipelines.

On March 11, 2011 I drove to their Selby Terminal and met with Michael McDonald, NuStar Energy Terminal Manager and Curtis Shorts, NuStar Energy Lead Maintenance Technician.

NuStar Energy is scheduled to conduct two hydrostatic pressure tests, CSFM #0973 (8 inch P-25 Kinder Morgan Concord line) and CSFM #0974 (12 inch P-28 Kinder Morgan Richmond line) hazardous liquid petroleum pipelines. These two pipelines were previously pressure tested in water on July 10, 2006. Due to a lapse in planning, NuStar Energy did not submit a "waiver request to pressure test in product" prior to the 2006 hydrostatic test deadline.

According to Mike McDonald, NuStar Energy requests using high flash JP-5 (Jet Fuel) as the hydrostatic test medium in lieu of water because it eliminates the risk of contaminating the U.S. Government Jet Fuel system. CSFM #0973 (8 inch P-25 Kinder Morgan Concord line) pumped 1.8 million barrels last year which is 79% of total annual volume for this line. CSFM #0974 (12 inch P-28 Kinder Morgan Richmond line) received 2.9 million barrels last year which is 97% of total annual volume for this line. These reported shipping volumes represent the annual demand of petroleum products required by the Defense Energy Support Center (DESC) from these two pipelines. In addition, using high flash JP-5 expedites the hydrostatic test procedure, minimizes downtime, and prevents the costly generation, storage, treatment, and disposal of 700 barrels (29,400 gallons) of contaminated test water, and will prevent generating 1,500 barrels of down graded transmix.

The CSFM #0973 (8 inch P-25 Kinder Morgan Concord line) is 8.625" O.D., 0.250" wt, API 5LX grade, x-42, ERW, built in 1981, ships refined petroleum products, originates at the NuStar Terminal, and transits 0.50 miles/2,640 feet in length to the Kinder Morgan Concord pipeline tie in located within the ConocoPhillips Rodeo Refinery. I have verified that the Maximum Operating Pressure (MOP) is 1,200 psig, and the Internal Design Pressure is 1,753 psig. Performance Mechanical will pressure test this pipeline at 1,500 psig for eight hours.

The CSFM #0974 (12 inch P-28 Kinder Morgan Richmond line) is 12.750" O.D., 0.375" wt, API 5LX grade, x-42, ERW, built in 1981, ships refined petroleum products, originates at the NuStar Terminal and transits 0.50 miles/ 2,640 feet in length to the Kinder Moran Richmond pipeline tie in located within the ConocoPhillips Rodeo

Refinery. I have verified that the Maximum Operating Pressure (MOP) is 480 psig, and the Internal Design Pressure is 1,778 psig. Performance Mechanical will pressure test this pipeline at 600 psig for eight hours.

The CSFM #0973 and CSFM #0974 pipelines parallel each other, transit in a northerly direction from the NuStar Tank Farm, cross encased under San Pablo Road, transit west below grade on NuStar property, and transits south encased under San Pablo Road into the ConocoPhillips Refinery property.

The CSFM #0973 pipeline casing is approximately 12.250" O.D. x 0.250" wt., API 5L, ERW, and the CSFM #0974 pipeline casing is 16.000" O.D. x 0.250" wt., API 5L, ERW.

Both CSFM #0973 and CSFM #0974 pipelines are protected by a deep well anode bed that was updated in 2009. According to Michael McDonald, both of these pipelines have not had a leak since the last hydrostatic pressure test conducted on July 11, 2006 by Performance Mechanical, and are not on our list of high risk pipelines.

Performance Mechanical Inc. is scheduled to perform both of the hydrostatic tests, and is currently on the Office of the State Fire Marshal's list of "Approved Hydrostatic Testing Companies".

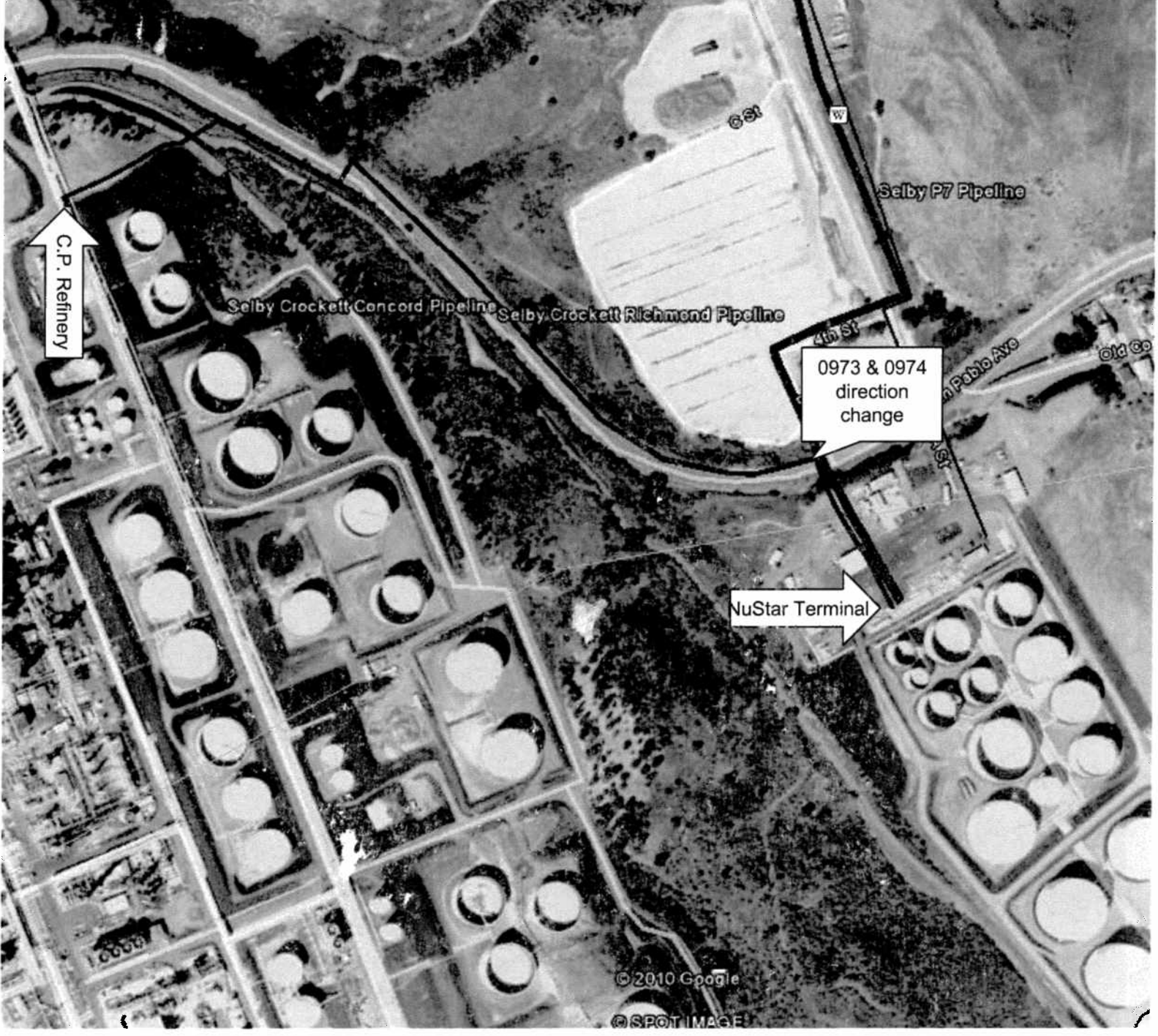
To understand this pipeline system layout, Michael McDonald, Curtis Shorts and I walked the pipeline right of way (ROW). We started inside the NuStar Tank Farm and walked the ROW to the first below grade uncased pipeline crossing under San Pablo Road, continued along the ROW thru NuStar property, followed the ROW to the second below grade encased pipeline crossing under San Pablo Road, continued into the ConocoPhillips Refinery, and concluded the ROW inspection where these pipelines tie into the Kinder Morgan Richmond and Concord manifolds.

The NuStar Energy pipeline right of way for CSFM #0973 and CSFM #0974 is located in a rural area of Selby. Past site inspections from this office indicate that this location is 90% rural and 10% urban. The Selby housing tract is the closest neighborhood and is about 100 yards east of the two pipelines. The ConocoPhillips office building is approximately 80 feet north east of these two pipelines. According to Michael McDonald these two pipelines do not pose a safety risk to this assembly area because it will be unoccupied during the hydrostatic pressure test process.

Performance Mechanical Inc. will conduct the hydrostatic test, set up their deadweight tester and recording chart at the NuStar Energy Terminal. Ponder Environmental will provide an on site standby vacuum truck during the hydrostatic pressure test.

NuStar Energy will notify the local Fire Department having fire suppression authority at least three working days in advance of the hydrostatic test. NuStar Energy and Performance Mechanical personnel will patrol and monitor the "entire pipeline right of way" during the hydrostatic test, and will communicate via hand held radios.

Taking all of this information into account, I recommend granting NuStar Energy a waiver to use high flash JP-5 in lieu of water for the next hydrostatic pressure test of CSFM #0973 (8 inch P-25 Kinder Morgan Concord line) and CSFM #0974 (12 inch P-28 Kinder Morgan Richmond line) scheduled for July 1, 2011.



C.P. Refinery

Selby P7 Pipeline

Selby Crockett Concord Pipeline Selby Crockett Richmond Pipeline

0973 & 0974  
direction  
change

NuStar Terminal

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