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South Portland, ME 04106

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[www.TRCSolutions.com](http://www.TRCSolutions.com)

May 4, 2012

HAND DELIVERED

Mr. J. Bruce Probert, Chairman  
Searsport Planning Board  
Searsport Town Office  
P.O. Box 499  
1 Union Street  
Searsport, ME 04974

**Re: DCP Searsport, LLC  
Applications for Site Plan Review Approval, Shoreland Zoning and  
Flood Hazard Development Permits**

Dear Bruce:

Attached please find the above-referenced applications for DCP Searsport, LLC's liquefied propane gas (LPG) receiving and distribution terminal proposed to be located adjacent to the Sprague and Irving Oil terminals at Mack Point in Searsport. I have also attached a check in the amount of \$659.40 to cover the application fees for the three permits. I look forward to working with you, the Searsport Planning Board and Searsport Code Enforcement Officer during your review and approval of these applications.

Should you have any questions please do not hesitate to contact me at (207) 529-2900 or [swallace@trcsolutions.com](mailto:swallace@trcsolutions.com).

Sincerely,  
TRC Environmental Corporation

A handwritten signature in blue ink, appearing to read "Steven Wallace", written over a light blue rectangular background.

Steven Wallace  
Project Manager

Cc: Becky Malloy, David Graham - DCP



Applications for  
Town of SEARSPORT, Maine  
Site Plan Review Approval,  
Shoreland Zoning Permit  
and Flood Hazard Development Permit

DCP SEARSPORT LPG TERMINAL

***Prepared for:***

DCP Searsport, LLC  
370 17<sup>th</sup> Street, Suite 2500  
Denver, Colorado 80202

***Prepared by:***



400 Southborough Drive  
South Portland, Maine 04106

April 2012

## **Application Forms**

**Town of Searsport Site  
Plan Permit Application**

FOR OFFICIAL USE ONLY

Map # \_\_\_\_\_ Lot # \_\_\_\_\_

Permit # (year/month/number): \_\_\_\_\_

Issue Date \_\_\_\_\_ Fee paid \_\_\_\_\_

APPLICANT

Name DCP Searsport, LLC Phone (303) 605-1961

Address 370 17th Street, Suite 2500, Denver, CO 80202

PROPERTY OWNER

Name Same as above Phone \_\_\_\_\_

Address \_\_\_\_\_

CONTRACTOR

Name To be determined Phone \_\_\_\_\_

Address: \_\_\_\_\_

PROPERTY LOCATION

Map \_\_\_\_\_ Lot: multiple Street location/address US Rt 1 & Station Avenue

Date lot created: \_\_\_\_\_ Zoning District: Ind/Comm Current Use: None

ABUTTERS

Name	Mailing Address	Map #	Lot#
1) <u>See Appendix J</u>			
2) _____			
3) _____			
4) _____			
5)			

PROPOSED USE OF PROPERTY

Multi-family \_\_\_\_\_ # of units \_\_\_\_\_ Commercial \_\_\_\_\_ Industrial X  
Institutional \_\_\_\_\_ Government \_\_\_\_\_ Other \_\_\_\_\_ Home Occupation \_\_\_\_\_

What are you planning to do?

Construct and operate a LPG import, storage and distribution terminal.

TYPE OF CONSTRUCTION

New building X Alterations/additions to existing building \_\_\_\_\_ Pier, dock, wharf, etc. \_\_\_\_\_

STRUCTURE (attach building plans, including front and side elevation) see attached

Dimensions \_\_\_\_\_ Height \_\_\_\_\_ Number of stories \_\_\_\_\_ Other \_\_\_\_\_

Total square feet of all structures on property \_\_\_\_\_

Setback from side and rear lot lines \_\_\_\_\_ Type of construction \_\_\_\_\_

Est. Cost \_\_\_\_\_ Type of foundation: Full basement \_\_\_\_\_ Frost Wall \_\_\_\_\_

Slab \_\_\_\_\_ Other \_\_\_\_\_ Describe \_\_\_\_\_

Heating: Hot air \_\_\_\_\_ Hot Water \_\_\_\_\_ Electric baseboard \_\_\_\_\_ A/C \_\_\_\_\_

Other \_\_\_\_\_

PROPERTY (please attach copy of site plan) see attached

Lot area: Width \_\_\_\_\_ x Depth \_\_\_\_\_ = Square ft (s.f.)/acres \_\_\_\_\_

Frontage on road \_\_\_\_\_ Proposed percentage of lot coverage \_\_\_\_\_

Square footage to be covered by non-vegetative surfaces \_\_\_\_\_

Clearing for construction \_\_\_\_\_ square feet

Square footage of home area to be used for business \_\_\_\_\_

PLUMBING (note whether public or private; if private, please attach copy of approved plumbing permit)

Sewage disposal: Existing: Public \_\_\_\_\_ Private \_\_\_\_\_

Proposed: Public ☒ Private \_\_\_\_\_

Water supply: Existing: Public \_\_\_\_\_ Private \_\_\_\_\_

Proposed: Public ☒ Private \_\_\_\_\_

#### IMPORTANT INFORMATION

1. Is this property part of a subdivision? Yes \_\_\_\_\_ No ☒

2. Is this property in the Shoreland Zone? Yes ☒ No \_\_\_\_\_

3. Are any wetlands or tributary streams involved? Yes ☒ No \_\_\_\_\_

If yes, locate them on your site plan.

4. Please provide a copy of any other permit(s) required for your project.

5. Are there any restricting deeds or covenants? Yes ☒ No \_\_\_\_\_

Explain Existing oil pipeline easement - see accompanying application package.

6. Please attach a parking plan and sketch.

7. Please attach a sketch of any sign(s), including all sign dimensions and setbacks.

8. Please add location, setback, and lighting to your site plan.

9. Please attach written erosion control plan.

10. Please attach copy of your deed, legal right or interest.

11. Planning Board may request other information as it deems necessary.

Additional information:

The undersigned owner or authorized agent hereby applies for a permit in accordance with all statutes, laws, codes, and ordinances of the State of Maine and the Town of Searsport.

The applicant certifies that all information and attachment submitted are true and correct and agrees to future inspections by the Town's Code Enforcement Officer at reasonable hours.

Michael S. Richards  
SIGNATURE OF APPLICANT

5/4/12  
DATE

[Signature]  
SIGNATURE OF AGENT (IF APPLICABLE)

May 4, 2012  
DATE

Applications must be received at the Searsport Town Office at least 10 days prior to the meeting.

FEE SCHEDULE

<u>Project Type</u>	<u>Fees</u>
Commercial, retail, industrial and institutional facilities	Base fee of \$40.00 plus \$5.00 per each 1,000 square feet of gross floor space up to 50,000 and \$2.00 per each 1,000 square feet thereafter
Home Occupation Facilities	Base fee of \$10.00 plus \$2.00 each 1,000 square feet of gross floor space.
Multi-family Dwellings	Base fee of \$40.00 plus \$25.00 per each dwelling plus \$5.00 per abutter notification

FOR PLANNING BOARD USE ONLY

Date: \_\_\_\_\_ Approved: \_\_\_\_\_ Denied: \_\_\_\_\_

If approved, the following conditions and safeguards were prescribed: \_\_\_\_\_

If denied, reason (s) for denial: \_\_\_\_\_

Board member signatures:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Town of Searsport  
Shoreland Zoning Permit Application**

FOR OFFICIAL USE ONLY

Map # \_\_\_\_\_ Lot # \_\_\_\_\_

Permit # (year/month/number) \_\_\_\_\_

Issue Date \_\_\_\_\_ Fee paid \_\_\_\_\_

APPLICANT

Name DCP Searsport, LLC Phone (303) 605-1961

Address 370 17th Street, Suite 2500, Denver, CO 80202

PROPERTY OWNER

Name Same as above Phone \_\_\_\_\_

Address \_\_\_\_\_

CONTRACTOR

Name To be determined Phone \_\_\_\_\_

Address \_\_\_\_\_

SOIL SCIENTIST/EVALUATOR

Name N/A Phone \_\_\_\_\_

Address \_\_\_\_\_

PROPERTY LOCATION

Map multiple Lot \_\_\_\_\_ Shoreland Zoning District General Development

Street location/address Off Station Avenue at Mack Point

Date lot created \_\_\_\_\_ Current use Mack Point Terminal

PROPOSED USE OF PROPERTY

One family \_\_\_\_\_ Multi-family \_\_\_\_\_ # of units \_\_\_\_\_ Commercial \_\_\_\_\_ Industrial X

Institutional \_\_\_\_\_ Government \_\_\_\_\_ Other \_\_\_\_\_ Home Occupation \_\_\_\_\_

What are you planning to do? Construct and operate a LPG transfer pipeline and rail car loading facility associated with the adjacent LPG Terminal.

TYPE OF CONSTRUCTION (check all that apply)

New residence \_\_\_\_\_ Garage/outbuilding \_\_\_\_\_ Alteration(s)/addition(s) to existing building \_\_\_\_\_

Repairs \_\_\_\_\_ Mobile home \_\_\_\_\_ Pier, dock, wharf, etc. \_\_\_\_\_ Road or driveway X

STRUCTURE (attach building plans, including front and side elevation) see attached

Dimensions \_\_\_\_\_ Height \_\_\_\_\_ Number of stories \_\_\_\_\_ Other \_\_\_\_\_  
Total square feet of all structures on property including deck space \_\_\_\_\_  
Elevation above 100 year flood \_\_\_\_\_ Setback from normal high water \_\_\_\_\_  
Setback from side and rear lot lines \_\_\_\_\_ Type of construction \_\_\_\_\_  
Est. Cost \_\_\_\_\_ Basement \_\_\_\_\_ Garage \_\_\_\_\_ # Bedrooms \_\_\_\_\_ # Bathrooms \_\_\_\_\_  
Type of foundation: Full basement \_\_\_\_\_ Frost Wall \_\_\_\_\_ Slab \_\_\_\_\_  
Other \_\_\_\_\_ Describe \_\_\_\_\_  
Heating: Hot air \_\_\_\_\_ Hot Water \_\_\_\_\_ Electric baseboard \_\_\_\_\_ A/C \_\_\_\_\_  
Other \_\_\_\_\_

PROPERTY (please attach copy of site plan) see attached

Lot area: Width \_\_\_\_\_ x Depth \_\_\_\_\_ = Square ft (s.f.)/acres \_\_\_\_\_  
Frontage on road \_\_\_\_\_ Frontage on waterbody \_\_\_\_\_  
Proposed percentage of lot coverage \_\_\_\_\_  
Square footage to be covered by non-vegetative surfaces \_\_\_\_\_  
Clearing for construction \_\_\_\_\_ square feet  
Clearing for access (roads, etc.) \_\_\_\_\_ s.f. Clearing for utilities: \_\_\_\_\_ s.f.  
Earth-moving: Less than 10 cubic yards \_\_\_\_\_ More than 10 cubic yards \_\_\_\_\_

PLUMBING (note whether public or private; if private, please attach copy of approved plumbing permit) N/A

Sewage disposal: Existing: Public \_\_\_\_\_ Private \_\_\_\_\_  
Proposed: Public \_\_\_\_\_ Private \_\_\_\_\_

Water supply: Existing: Public \_\_\_\_\_ Private \_\_\_\_\_  
Proposed: Public \_\_\_\_\_ Private \_\_\_\_\_

ENVIRONMENTAL CONCERNS

1. Is this property part of a subdivision? Yes \_\_\_\_\_ No X  
2. Are any wetlands or tributary streams involved? Yes X No \_\_\_\_\_  
If yes, locate them on your site plan.  
3. Is this a non-conforming lot? Yes \_\_\_\_\_ No X  
Explain \_\_\_\_\_

4. Are any existing structures non-conforming? Yes \_\_\_\_\_ No X  
Explain \_\_\_\_\_

5. Are there any restricting deeds or covenants? Yes \_\_\_\_\_ No X  
Explain \_\_\_\_\_

6. Please provide a copy of any additional permit(s) required.  
7. Please attach written erosion control plan.  
8. Please attach copy of your deed, legal right or interest.  
9. Planning Board may request other information as it deems necessary.



Additional information: See accompanying application package

The undersigned owner or authorized agent hereby applies for a permit in accordance with all statutes, laws, codes, and ordinances of the State of Maine and the Town of Searsport.

The applicant certifies that all information and attachment submitted are true and correct and agrees to future inspections by the Town's Code Enforcement Officer at reasonable hours.

Michael S. Richards  
SIGNATURE OF APPLICANT

5/4/12  
DATE

Stewart  
SIGNATURE OF AGENT (IF APPLICABLE)

May 4, 2012  
DATE

Applications must be received at the Searsport Town Office at least 10 days prior to the meeting.

FOR PLANNING BOARD USE ONLY

Date: \_\_\_\_\_ Approved: \_\_\_\_\_ Denied: \_\_\_\_\_

If approved, the following conditions and safeguards were prescribed: \_\_\_\_\_

If denied, reason (s) for denial: \_\_\_\_\_

Board member signatures:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Draw a simple sketch showing both the existing and proposed structures with dimensions

**Front or Rear Elevation**

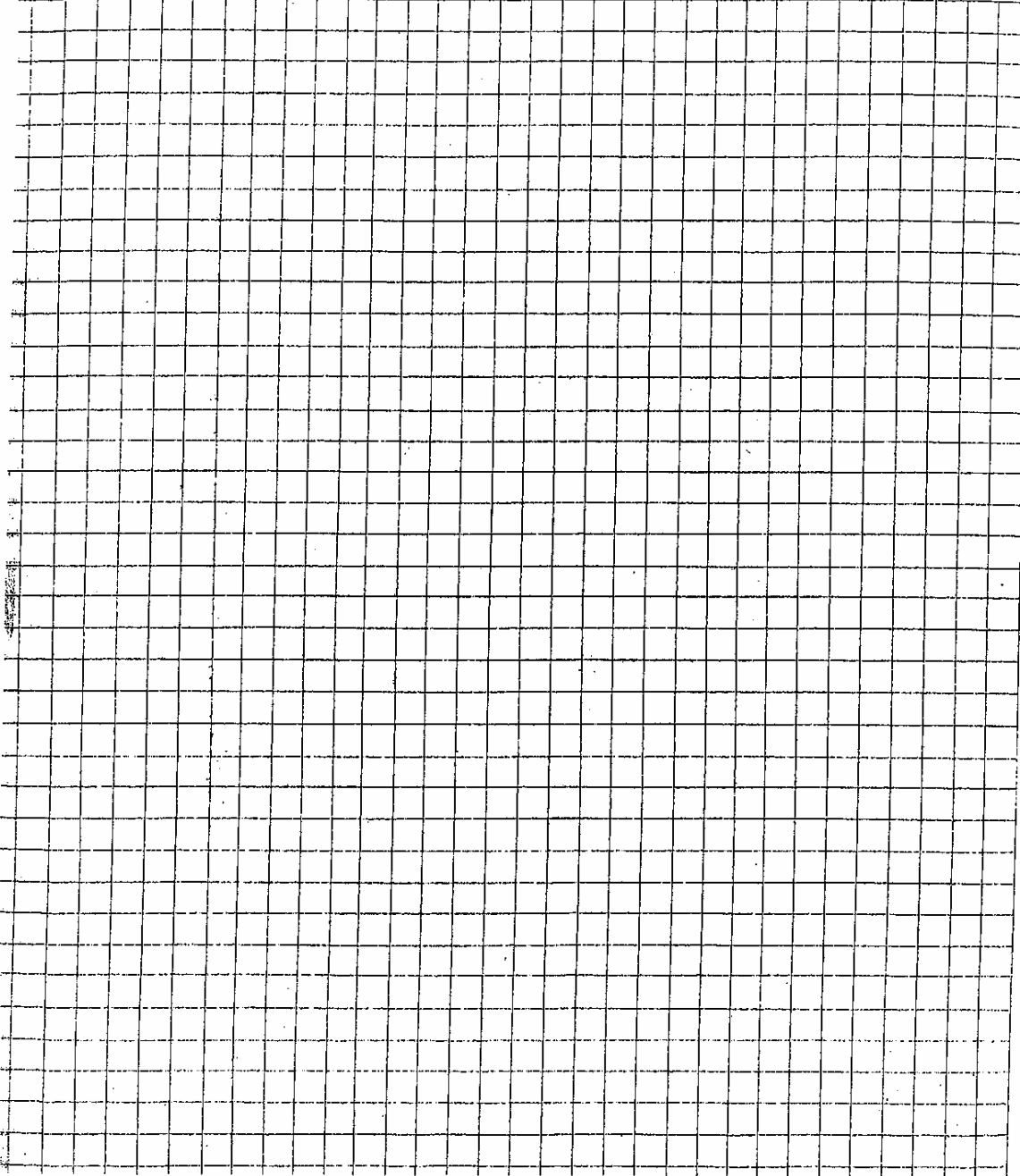
see attached

**Side Elevation**

Applicant Name see attached Property Location \_\_\_\_\_ Map \_\_\_\_\_ Lot \_\_\_\_\_

**Site Plan**

Include lot lines; exact location of all existing and proposed structures, including porches, decks and outbuildings, with accurate setback distances from the normal high-water line; location of proposed well(s) and septic system(s).



## **Agent Authorization Letter**



**MICHAEL S. RICHARDS**

*Vice President,  
General Counsel & Secretary*

303-633-2912      direct  
303-633-2921      fax

[msrichards@dcppartners.com](mailto:msrichards@dcppartners.com)

**DCP Midstream Partners, LP**

370 17th Street, Suite 2775  
Denver, CO 80202

[www.dcppartners.com](http://www.dcppartners.com)

September 29, 2011

Town of Searsport  
1 Union Street  
Searsport, Maine 04974

**Re: DCP Searsport LLC**

To Whom It May Concern:

As Secretary of DCP Searsport LLC (the "Company"), I hereby certify that TRC Environmental Corporation is its duly authorized agent to act on behalf of the Company to prepare applications for environmental and land use permits and approvals, conduct environmental studies and surveys, and to represent the Company in support of our applications to obtain the necessary authorizations for construction and operation of a liquefied propane terminal in Searsport, Maine.

If you have any questions, or need additional information, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Michael S. Richards", written in a cursive style.

Michael S. Richards

## **DCP Searsport LPG Terminal Description**

## **PROJECT DESCRIPTION AND PURPOSE**

DCP Searsport, LLC (DCP) is submitting this application to the Searsport Planning Board for a Site Plan Review Approval, Shoreland Zoning and Flood Hazard Development Permits to authorize the construction and operation of a liquid propane gas (LPG) import, storage and distribution terminal in Searsport, Maine. DCP Searsport, LLC is owned by DCP Midstream Partners, LP, headquartered in Denver, Colorado.

The property to be developed is adjacent to two existing petroleum storage and distribution facilities operated by Sprague Energy Corporation (Sprague) and Irving Oil Corporation (Irving) and known as the Mack Point Intermodal Cargo Terminal (the Mack Point Terminal). The Mack Point Terminal has an existing Liquid Cargo Pier, an existing Dry Cargo Pier, numerous existing truck load out facilities for products other than LPG, and is serviced by a Montreal, Maine and Atlantic Railroad spur. DCP would receive LPG from ships docked at the existing Dry Cargo Pier (the pier) pumped through a new, approximately one-mile long LPG transfer pipe to a new bulk storage tank at the DCP Terminal. DCP would then load trucks and rail cars at the DCP Terminal for distribution of LPG throughout Maine. The location of the proposed LPG terminal is shown on the United States Geological Survey (USGS) Quad excerpt, provided as Figure 1.

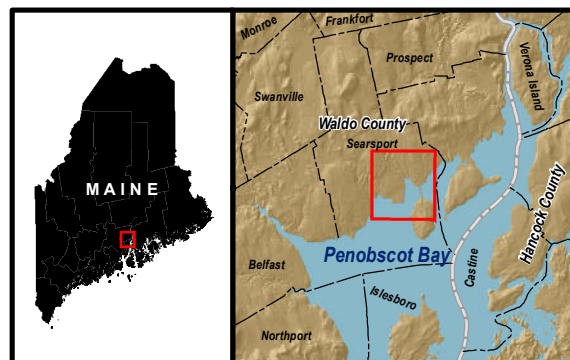
### **Proposed Facility Description**

Construction of the DCP Terminal will entail the installation of one LPG bulk storage tank, ship unloading facilities on the existing pier, a truck loading station, and a rail car loading station. The facility will also include the installation of ancillary equipment such as ethyl-mercaptan storage tanks, an LPG fuel tank, three propane-fired heaters, an emergency propane flare, an emergency diesel-fueled generator, and an emergency diesel-fueled fire water pump. A fire water storage tank is also proposed; however, DCP is working with the Searsport Water District to possibly upgrade the Town water lines to provide sufficient water for all of DCP's needs. If the water line along Station Avenue is upgraded, the fire water storage tank will not be needed. Either option will benefit the town by providing a sufficient, reliable source of fire-fighting water. Administration, compressor and motor control center buildings, five electric compressors, an electric cooler, and four electric loading pumps will also be required. The facility will operate 24 hours per day, typically seven days per week. The level of facility operation will be highest during the peak heating season. A simplified process flow illustration is provided as Figure 2. Pre- and Post-Development Site Plans are provided in Appendix A.




### **Ship Unloading**

The DCP Terminal will utilize the existing Dry Cargo Pier operated by Sprague Energy to receive shipments of liquid propane for offloading to its LPG storage tank. The maximum throughput of the DCP Terminal is based on receiving six ships per year, with each vessel capable of carrying up to approximately 33,000 metric tons (MT) (approximately 410,000 barrels (bbl)) of liquid propane maintained at approximately -40 degrees Fahrenheit (°F). The actual number of ships per year could range from four to eight; however, the maximum amount of LPG received is not expected to exceed 200,000 MT (approximately 2,476,000 bbl) annually. A portable marine unloading arm manifold will be used to connect the LPG discharge piping on the





## LEGEND

-  Site Boundary  
 Transfer Pipeline  
 County Boundary (MEGIS)  
 Town Boundary (MEGIS)

Data Sources: Maine Office of GIS (MEGIS), United States Geological Survey (USGS) - Searsport and Castine Topo Quads.  
Projection: NAD83, UTM Zone 19N, Grid North.

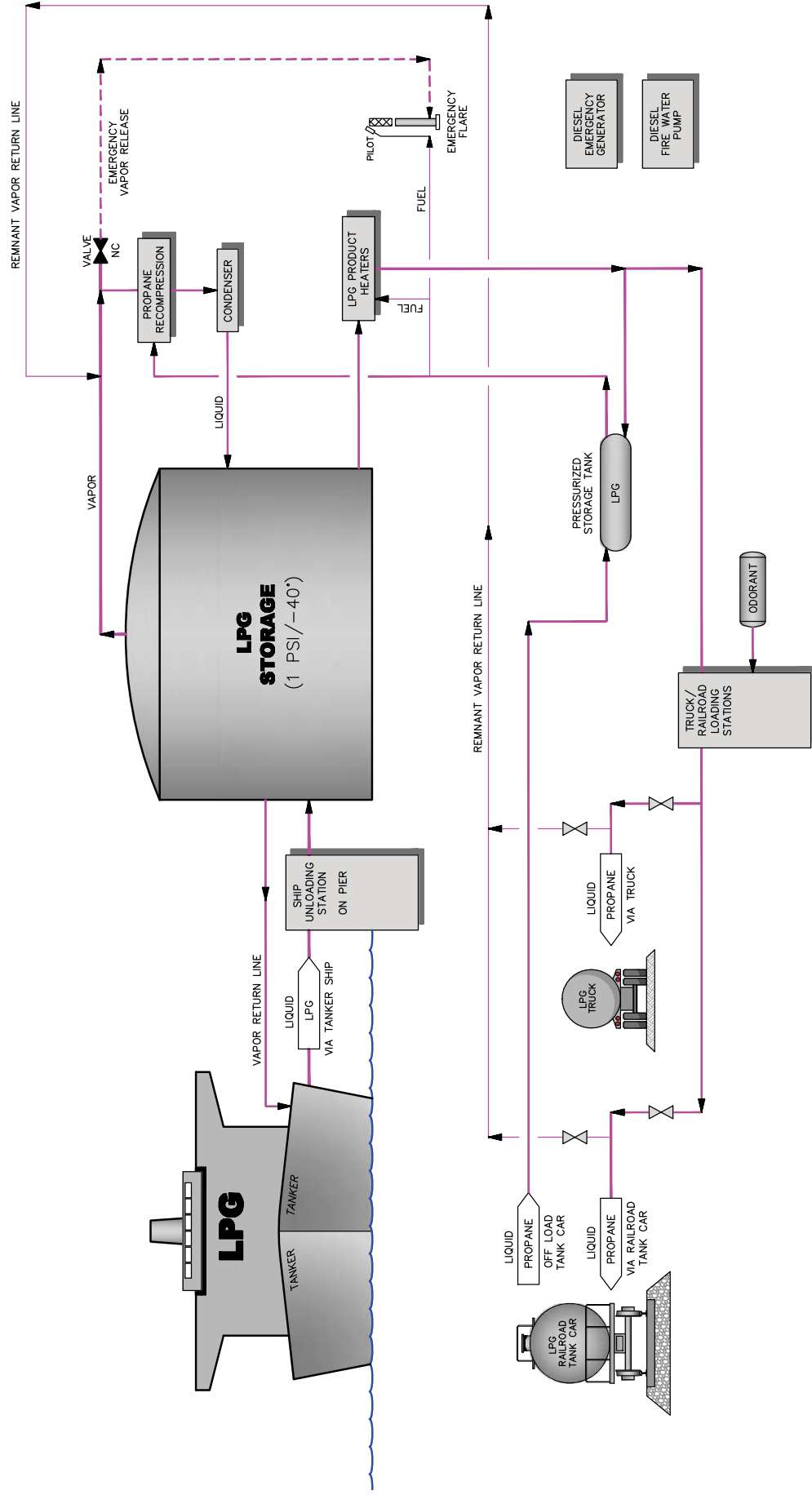
**DCP SEARSPORT, LLC**

**DCP Searsport Propane Terminal**  
**Searsport, Maine**

**Figure 1:  
Site Location Map**

Created by:  4/4/2012





**Figure 2**  
**SIMPLIFIED PROCESS FLOW DIAGRAM**

## SEARSPORT PROPANE DISTRIBUTION TERMINAL

**Searsport, Maine**

\data\EhsDrawings\Mapping\PropaneTerminals\Searsport\_Flow

REV	DATE	REVISION	CHK'D ENGR.	BY	CHK'D ENGR.	BY	CHK'D ENGR.
0	11-11-10	PROPOSED FACILITY LAYOUT	J.R.E. D.W.G.				
1	11-29-10	ADDED FIRE WATER PUMP	J.R.E. D.W.G.				
2	12-6-10	REMOVED PROPANE BULLET TANKS	J.R.E. D.W.G.				
3	2-28-11	ADDED VAPOR RETURN LINE & LPG BULLET TANKS	J.R.E. D.W.G.				
4	4-1-11	ADDED RAILROAD TANK CAR OFF LOAD	J.R.E. D.W.G.				

ship with a new 16-inch, insulated unloading pipe located beneath or alongside the pier. The unloading pipe will extend approximately one mile, approximately half of which will be above ground, the other half below ground, and transfer the LPG to the bulk storage tank at the new terminal. An insulated 10-inch vapor return line (referred to hereinafter collectively with the 16-inch unloading pipe as the transfer pipe) will transfer excess vapors displaced from the storage tank during the fill process back to the vessel for cooling and reintroduction into the liquid propane being offloaded. Each vessel will be at the dock for approximately 36 to 48 hours for offloading.

### **LPG Bulk Storage Tank**

The outdoor LPG bulk storage tank will be a vertical, insulated domed tank with diameter of approximately 202 feet and height above ground of approximately 138 feet. The storage tank will have a capacity of 540,000 bbl (approximately 22.7 million gallons) and vertical walls approximately 102 feet high. The need for a bulk storage tank of this size is based on several factors. They are: the size and availability of trans-oceanic LPG transport vessels, the need to maintain operational flexibility to supply the Maine market when shipments are delayed or not available, the economics of providing a cost competitive product, and the lack of sufficient, industrially-zoned land on Mack Point to locate two or more smaller storage tanks which together provide the same total storage capacity.

The 22.7 million gallon storage capacity reflects the current availability of trans-oceanic LPG transport vessels. The capacity of the current fleet of oceangoing ships that transport LPG varies between approximately 10.8 and 17.3 million gallons, with the “typical” capacity being approximately 15.6 million gallons. DCP is not able to specify which of the available vessels will be used, and must compete for their use with other facilities in the U.S. Smaller ships are used for short haul production areas on the North Sea but are not designed or used for trans-oceanic voyages.

Therefore, the DCP facility’s storage capacity must be sufficient to accommodate up to approximately 17 million gallons of propane in addition to the propane that is still in the tank and the time of vessel unloading. The 22.7 million gallon tank would allow DCP to maintain approximately six million gallons of propane and safely unload the largest ship. During peak heating season this gives DCP approximately two weeks of operation before the Terminal would be out of propane. Given the bad weather a ship may experience during a trans-oceanic crossing in the winter, along with potential scheduling issues at the loading and unloading ports, a two week window for ship arrival is very tight. To run a successful propane business, DCP must order and schedule ship deliveries in March of each year for the following heating season. A significant amount of expertise is needed to schedule the timing of deliveries to coincide with the capacity of the tank to receive a full ship load without placing the facility in danger of running out of propane and thus being unable to fulfill contractual deliveries. A smaller tank would result in a potential supply shortage, which would not meet the primary purpose for developing the marine terminal; i.e., to provide a reliable and economical supply of propane for Maine.

With respect to the use of two or more smaller tanks with the same total capacity, the site does not have sufficient land area for two or more smaller tanks along with the required secondary

containment structures. Lastly, sufficient land area for another refrigerated storage tank and its associated containment structure is not available at any other industrially-zoned location on Mack Point.

The propane will be stored in a liquid state at essentially atmospheric pressure (0.5-1.5 pounds per square inch gauge (psig)) by maintaining the temperature between -44 and -42° F. Boil-off vapors will be collected and returned to the tank using refrigeration units. The refrigeration units will consist of three first stage and two second stage electric-powered compressors to pressurize the vapor followed by an electric-powered cooler to condense the boil off vapors into liquid for reintroduction back into the bulk storage tank. The compressors will be located inside a metal sided, acoustically treated building that is approximately 65 feet long by 45 feet wide and 50 feet high at the peak of the roof.

The storage tank will have an emergency control valve to route vapors to an emergency flare to protect against an over-pressurization situation of the storage tank. The emergency control valve will be set to begin flaring if the tank pressure reaches 1.8 psig.

The tank will also be equipped with process safety valves (PSV) that vent to atmosphere to prevent a catastrophic tank failure if flaring is insufficient to maintain the tank pressure at a safe level. Three PSVs will be set to open if the tank pressure reaches 2.0 psig, and six more will open if the tank pressure reaches 2.2 psig. Other PSVs will also be located throughout the facility. These additional PSVs will not vent vapor to the atmosphere; instead, they will route vapors for re-liquefaction and re-collection in the bulk storage tank.

The bulk storage tank will be surrounded by an earth and stone-covered masonry secondary containment structure capable of containing 100 percent of the entire tank capacity to prevent the spread of the LPG in the very unlikely event of a leak.

### **Loading Stations**

The proposed terminal will have truck and rail car loading capabilities, although the rail loading facilities are to be constructed at a later date. To prepare the LPG for loading into either trucks and/or rail cars, it will be heated to near ambient temperature by three outdoor propane-fired heaters which also pressurizes the propane. The warmed, pressurized LPG will be fed to the loading stations and into a truck or rail car. Ethyl-mercaptan will be injected at the loading stations for odorization as a truck or rail car is filled.

The truck loading station will have three loading racks. One future rail car loading rack is also planned, which will be able to load up to four rail cars at a time. Each loading rack will be fed by a 500 gallon per minute (gpm) electric loading pump located near the bulk storage tank. The LPG that remains in the couplings connecting the fill pipes to the trucks and rail car will be allowed to vaporize in a vapor return line and be routed for re-liquefaction and re-collection in the bulk storage tank, resulting in minimal emissions to the atmosphere. Table 1 provides the maximum possible loading schedule, based on the design and maximum throughput of the facility. It should be noted that the use of the maximum possible loadout schedule is driven by the need to ensure that the maximum potential for air emissions is captured and addressed for

permitting purposes. The likelihood that these maximum loadout rates will ever occur is very small and would be a very isolated occurrence should it happen.

**Table 1**  
**Maximum Loading Schedule**

<b>Loading Station</b>	<b>Loadouts per hour</b>	<b>Loadouts per day</b>	<b>Loadouts per year</b>
Truck	9	144	9,000
Rail Car	1	8	600

Table 2 provides a typical loading schedule that is likely to occur.

**Table 2**  
**Typical Loading Schedule**

<b>Loading Station</b>	<b>Mid-Winter (Peak Heating Season)</b>		<b>Summer</b>	
	<b>Loadouts per hour</b>	<b>Loadouts per day</b>	<b>Loadouts per hour</b>	<b>Loadouts per day</b>
Truck	4-6	50-60	<1	12-15
Rail Car	1	8	1	8

### **Emergency Flare**

The proposed terminal will include an emergency flare, expected to be approximately 75 feet tall, with a continuously operating propane pilot light. The flare will be sized to handle storage tank boil-off during process upsets. In addition to infrequent process upsets such as the PSV venting described previously, emergency use of the flare will be required during any situation resulting in the loss of refrigeration for the LPG storage tank. Occurrences of insufficient refrigeration are expected to be limited to periods of prolonged commercial power loss. While the facility will have redundant refrigeration capacity, there could be a limited number of occasions when multiple equipment failures could require the use of the flare as well. For air permitting purposes the emissions from the flare are based on a maximum potential operation of 500 hours per year. However, the flare is expected to operate significantly less.

### **Other Equipment**

Other significant equipment at the proposed facility would include:

- four pressurized outdoor 1,000-gallon ethyl-mercaptan storage tanks to odorize the propane as it enters a truck or rail car;
- a pressurized outdoor 90,000-gallon LPG storage tank that would provide the fuel for the heaters and flare pilot;

- a 150 kilowatt emergency generator for control room operations with an associated 640-gallon diesel fuel storage tank located inside an approximately 60-foot long by 20-foot wide by 20-foot high motor control center building;
- a 175 horsepower emergency fire water pump with a separate 280-gallon diesel fuel storage tank located inside a small pump house;
- a 450,000-gallon fire water storage tank that will be approximately 40 feet in diameter by 50 feet tall (not needed if the Station Avenue water line is upgraded); and
- an administration building approximately 125 feet long by 40 feet wide by 20 feet high to provide office, communications and bathroom facilities for terminal personnel, dispatcher facilities for truck and rail car loadout, house the terminal control and monitoring equipment, etc.

### **Existing Site Description and Facilities**

The location of the proposed LPG terminal is shown on Figure 1. The terminal property is situated between U.S. Route 1 and the existing railroad spur terminating at the Mack Point Terminal. A LPG storage tank and containment area, associated truck and rail car loading facilities, administration building, ancillary terminal equipment and a portion of the transfer pipe connecting the storage tank with the pier would be located on two abutting parcels of land totaling approximately 23.6 acres (the upper parcel), to be owned by DCP. An existing underground oil pipeline traverses the northwest corner of the upper parcel and will be unaffected by the proposed development.

This portion of the project area is currently almost entirely forested with early successional/hardwood sapling and more mature secondary growth components. The secondary growth areas are comprised of a mix of conifers and hardwoods. Several shallow to deep drainage swales, formed in silty textured glacio-marine surficial deposits and containing freshwater wetlands and a stream component, run across the site in a general northwest to southeast orientation. Forested and scrub-shrub freshwater wetland pockets are also present. The topography slopes downward from U.S. Route 1 towards Long Cove to the southeast. Existing elevations range from approximately 80 to 12 feet above mean sea level.

It should be noted that the regulated natural resources found on the site (the freshwater wetlands and stream component) are not unique or high value. Compensation for the proposed impacts to these resources will be made in the form of an in-lieu fee paid to the Maine Department of Environmental Protection (MDEP) and replacement of an old, inadequately sized and positioned culvert on Long Cove Brook, in accordance with MDEP and U.S. Army Corps of Engineers (USACE) requirements. There are no vernal pools or threatened or endangered species present on the site.

The site is bounded by commercial and residential development along U.S. Route 1 to the northwest; residential land, small forested patches, and the railroad to the north, northeast, and southeast; and small forested patches and residences along Station Avenue to the south and southwest. Of the approximately 23.6-acre upper parcel, approximately 18.7 acres is zoned for Industrial use by the Town of Searsport, approximately 3.8 acres is zoned for Commercial use (formerly the "Southstreet Development parcel"), with the remaining approximately 1.1 acres

falling within the Shoreland Zone. Approximately 19.4 acres of the upper parcel will be permanently developed and maintained as part of the LPG storage facility and truck and rail car loading and distribution facilities.

A generally fifty-foot wide, approximately 5,100-foot long corridor for the remainder of the transfer pipe would extend from the southern-most corner of the commercially-zoned DCP parcel at the corner of U.S. Route 1 and Station Avenue, cross Station Avenue onto land owned by Sprague Energy (Sprague Way Lane), and continue through the industrially-zoned Sprague facility generally following existing pipe runs to the pier. The transfer pipe would be located underground from the Station Avenue crossing until it reaches the existing Sprague fence along Sprague Way Lane, then be installed predominantly aboveground to the pier. This corridor would consist of approximately 5.7 acres of land, parts of which are owned by Sprague and the rest by the Maine Port Authority. Of the 5.7-acre corridor, approximately 4.9 acres is within existing roads or zoned for Industrial use by the Town of Searsport, with the remaining approximately 0.8 acre falling within the Shoreland Zone. The corridor consists entirely of previously disturbed soils and fill materials, with no wetlands.

The existing ship traffic at the two piers totals approximately 136 vessels per year on average with a maximum to date of 166 vessels per year. The number of trucks currently entering and exiting the Mack Point Terminal is approximately 20,000 per year on average with up to approximately 30,000 trucks per year as a maximum. The existing rail traffic is typically approximately 2,500 rail cars per year, averaging about 10 to 15 cars at a time.

An additional approximately 20.1-acre parcel of land, consisting of approximately six acres of forested upland between the existing railroad spur and Long Cove with the remainder consisting of tidal wetlands and mudflat, will be owned by DCP. The area above high tide contains similar drainages and associated bands of freshwater wetland, one of which originates on the upper parcel. No development is proposed for this area, and a conservation easement will be placed on this land to prevent any future development. It will provide natural, visual buffers for locations to the east and southeast, and ensure that the coastal/estuarine as well as forested upland habitat will continue to be available for use by wildlife. All of the forested upland area is within the Shoreland Zone except for approximately 0.2 acre which is zoned as Industrial.

DCP has purchased another parcel of commercially-zoned, forested land south of the proposed terminal, totaling approximately 3.5 acres with frontage on Station Avenue (formerly the “Norvlaan parcel”). Existing vegetation consists of early successional/hardwood sapling and more mature secondary growth components comprised of a mix of conifers and hardwoods. Forested freshwater wetlands are also present. No development is planned for this parcel, which will provide a natural, visual buffer for locations to the south and southwest, and ensure that the forested upland habitat as well as the forested wetlands on this parcel will continue to be available for use by wildlife.

Table 3 provides a summary of the land area requirements for the proposed facilities.

**Table 3**  
**Land Requirement Summary**

<b>Parcel</b>	<b>Total Area</b>	<b>Area Affected by Construction/Operation</b>
Purchased for Terminal Development	23.6 acres	19.4 acres
Purchased - to Remain Undeveloped	23.6 acres	-0-
Transfer Pipe Corridor	5.7 acres	5.7 acres
<b>TOTALS</b>	52.9 acres	25.1 acres

### **Construction Schedule**

Construction of the DCP Terminal is expected to begin as soon as possible in 2012 and take up to approximately 18 months of active construction to complete for full operations using LPG distribution by truck. The schedule for construction of the rail car loading facility is unknown at this time.

## **TOWN OF SEARSPORT ZONING DISTRICTS AND REQUIRED PERMITS AND APPROVALS**

The proposed DCP Terminal falls under the category of a ‘Bulk Fuel Distribution Facility-Wholesale’, which is listed in Section IV of The Land Use Ordinance of the Town of Searsport, Maine (the Land Use Ordinance) as a permitted use in the Industrial Zone. As such, the DCP Terminal requires Site Plan Review and Approval in accordance with the Land Use Ordinance and the Site Plan Review Ordinance for the Town of Searsport, Maine (the Site Plan Review Ordinance) as well as issuance of a Building Permit by the Code Enforcement Officer. The principal operational areas and equipment associated with the DCP Terminal; i.e., the bulk LPG storage tank and containment berm, LPG product heaters and recompression/condensing equipment, truck and rail car loadout facilities and associated pumps, the flare, and smaller storage tanks other than potentially the fire water storage tank will be located on the upper parcel within the land zoned for Industrial use. The administration building and associated parking area, the facility entrance road, fire water tank (if needed) and water pump will be located on commercially-zoned land.

Structures built on, over or abutting a dock, wharf or pier, or located within 250 horizontal feet of areas affected by tidal action are subject to the Shoreland Zoning Ordinance for the Town of Searsport (the Shoreland Zoning Ordinance). Approximately 750 feet of the transfer pipe will be within 250 feet of Long Cove. An additional approximately 565 feet of the transfer pipe will be located over Long Cove, attached to the existing Dry Cargo Pier at the Mack Point Terminal. Therefore these portions of the transfer pipe will be within the Shoreland Zone. In addition, the proposed railcar loading facility and the end (approximately 270 linear feet) of its associated access road will be located within the Shoreland Zone. Therefore a Shoreland Zoning Permit from the Planning Board is also needed for these portions of the Project.

Approximately 820 feet of the transfer pipe will be located within Flood Hazard Zone VE (565 feet of which is located along the pier) and another 125 feet would be located within Flood Hazard Zone AE, as determined from the Federal Emergency Management Agency flood insurance rate map (FIRM). As a result, this portion of the transfer pipe is subject to the Floodplain Management Ordinance for the Town of Searsport (the Floodplain Management Ordinance), and a Flood Hazard Development Permit must be obtained from the Code Enforcement Officer.

The following sections of this application discuss DCP’s compliance with the applicable requirements of the:

- Land Use Ordinance;
- Site Plan Review Ordinance;
- Shoreland Zoning Ordinance; and
- Floodplain Management Ordinance.

An application for a Building Permit will be submitted to the Code Enforcement Officer at a later date.



**COMPLIANCE WITH THE LAND USE ORDINANCE  
OF THE TOWN OF SEARSPORT, MAINE**

## **Permit Application Requirement**

The Land Use Ordinance applies to all land areas within the Town of Searsport except the Shoreland Zone. As a result DCP's proposed development is subject to the Land Use Ordinance, with the exception of approximately 1,315 feet of the transfer pipe (which includes the portion attached to the pier), the proposed railcar loading facility, and approximately 270 linear feet of its associated access road which are located within the Shoreland Zone. Sections IV and VI of the Land Use Ordinance require that an application be submitted to the Planning Board for review and approval in accordance with the Site Plan Review Ordinance for the portions of the proposed development that are not located within the Shoreland Zone. DCP's Site Plan Review Application is provided in this document.

## **Industrial Zone Requirements**

Section III of the Land Use Ordinance and associated Town of Searsport Land Use District Map (the Land Use Map) defines the approximately 19.8-acre parcel of land (Tax Map 7, Lot 56) on which the principal operational areas and equipment associated with the DCP Terminal will be located as zoned for Industrial Use. The proposed DCP Terminal falls under the category of a 'Bulk Fuel Distribution Facility-Wholesale,' which is listed in Section IV of the Land Use Ordinance as a permitted use (subject to Planning Board approval) in the Industrial Zone.

### **Industrial Zone Dimensional Requirements**

The Schedule of Uses for development within the Industrial Zone in Section IV of the Land Use Ordinance contains the following dimensional requirements:

- **Minimum Lot Size – 3 acres.** The portion of the DCP Terminal that will be located in the Industrial Zone is located on a 19.8-acre parcel of land.
- **Minimum Lot Size per Dwelling Unit – 3 acres.** Not applicable.
- **Minimum Road Frontage – 200 feet.** The parcel of land containing the portion of the DCP Terminal that will be located in the Industrial Zone has 200 feet of road frontage on U.S. Route 1.
- **Setbacks from Property Lines – Front: 60 feet; Side and Rear: 40 feet.** As can be seen from review of the Post Development Site Plans provided in Appendix A of this document, the portion of the DCP Terminal that will be located in the Industrial Zone meets the setback requirements from all property lines.
- **Maximum Structure Height – Principal Structures: 60 feet; Cranes, Bulk Fuel Storage Tanks, Silos, Grain Elevators, and Similar Structures: 150 feet.** The tallest building on the portion of the DCP Terminal that will be located in the Industrial Zone (the Compressor Building) will be approximately 50 feet above grade at the peak of the roof; the tallest other structure (the Bulk LPG Storage Tank) will be approximately 138 feet above grade at the top of the dome.

## Commercial Zone Requirements

Section III of the Land Use Ordinance and associated Town of Searsport Land Use District Map (the Land Use Map) defines the approximately 3.8-acre parcel of land (Tax Map 7, Lot 60) on which the administration building and associated developed areas will be located as zoned for Commercial Use. The administration building falls under the category of a 'Professional Offices/Office Complex,' which is listed in Section IV of the Land Use Ordinance as a permitted use (subject to Planning Board approval) in the Commercial Zone.

### Commercial Zone Dimensional Requirements

The Schedule of Uses for development within the Commercial Zone in Section IV of the Land Use Ordinance contains the following dimensional requirements:

- **Minimum Lot Size – 5,000 square feet with public water/sewer.** The portion of the DCP Terminal that will be located in the Commercial Zone is located on an approximately 3.8-acre (approximately 163,300 square feet) parcel of land.
- **Minimum Lot Size per Principal Structure– 5,000 square feet with public water/sewer.** Only one principal structure (the Administration Building) will be located in the Commercial Zone and will have public water and sewer.
- **Minimum Road Frontage – State maintained roads (U.S. Route 1) subject to MDOT's Access Management Standards; Other Roads: 25 feet.** DCP has received a Driveway/Entrance Permit from the Maine Department of Transportation (MDOT) for the Terminal exit driveway (copy provided in Appendix B), which documents compliance with the Access Management Standards for U.S. Route 1. The Commercial lot has 500 feet of frontage on Station Avenue.
- **Setbacks from Property Lines – Locations other than Downtown: Front, Side and Rear: 10 feet.** As can be seen from review of the Post Development Site Plans provided in Appendix A of this document, the portion of the DCP Terminal that will be located in the Commercial Zone meets the setback requirement from all property lines.
- **Maximum Building Height at Ridge Line – 40 feet.** The Administration Building will be approximately 20 feet above grade at the peak of the roof.

## Land Use Standards

Section V of the Land Use Ordinance contains the following Land Use Standards with which all new development subject to approval under the Land Use Ordinance must comply.

- A) Conformance with Comprehensive Plan.** As demonstrated by the information provided in this document, the proposed DCP Terminal will conform with the Town of Searsport Comprehensive Plan (the Comprehensive Plan) because it is an allowable use in the land use districts envisioned in the Comprehensive Plan and defined by the Land Use Ordinance, and it will meet all applicable land use standards and other provisions of pertinent local ordinances and regulations that have been developed based on the recommendations in the Comprehensive Plan. The Comprehensive Plan notes that the chosen location for the proposed DCP Terminal, the Industrial District, is intended for "industrial and large

commercial development,” and is one of the only areas in Searsport where such large scale development may occur, and where such development is appropriate. This project is well sited and will promote appropriate economic development as noted on page D-16 of the Comprehensive Plan. Further, the proposed DCP Terminal is being designed and will be constructed and operated in compliance with all applicable state and federal laws and regulations and, as described in detail in response to Land Use Standard F: Industrial Performance Standards on pages 19 through 28 of this application.

Siting the DCP Terminal at Mack Point is also entirely consistent with the *Sears Island Planning Initiative Draft Steering Committee Consensus Agreement* (the *Sears Island Agreement*) that was signed in April of 2007 by 38 stakeholders representing a wide variety of state, regional and local interests after a year-long, comprehensive series of meetings with wide-spread public participation. The appropriate uses for Sears Island had been a matter of public debate for decades. The following is an excerpt from the *Sears Island Agreement*:

*Mack Point shall be given preference as an alternative to port development on Sears Island. MaineDOT, in conjunction with interested parties, shall investigate and share factual information...on the extent to which Mack Point can, in fact, accommodate future marine transportation needs, including investigating the possibilities for acquisition and/or development of additional acreage for such use.*

As evidenced by the federal and state permits listed on page 29 of this application in response to Section VI.F of the Land Use Code, DCP has acquired all of the federal and state permits and approvals necessary to construct the proposed facility. DCP will comply with all conditions included in those permits as well as all other applicable federal and state laws and regulations affecting its operations. Through submittal of this application, DCP is demonstrating its intent to comply with all applicable local ordinances and permit requirements.

- B) Access Requirements.** Critical factors in the location and design of the DCP Terminal entrance and exit driveways were that these access points to public roads provide appropriate safeguards against hazards to traffic and pedestrians in the roads, provide safe and convenient circulation on public roads, and avoid traffic congestion on any road. The exit roadway onto U.S. Route 1 also addresses MDOT’s Access Management Standards, as evidenced by the issuance of a Driveway/Entrance Permit from MDOT. The entrance and exit driveways are being designed to avoid the need for trucks to park on public roads while waiting to be loaded, and to ensure safe and efficient vehicle circulation within the Terminal.
- C) Buffers.** DCP is using a variety of methods in the Terminal design to minimize offsite impacts from exposed machinery, outdoor storage areas, vehicle loading and parking, noise, odor and light pollution. These methods include the installation of perimeter fencing; using a combination of existing and proposed topography and forest vegetation; limiting the location, design and amount of exterior lighting to avoid off-site illumination; and ensuring that the facility will comply with the applicable provisions of the MDEP visual impact requirements and noise standards.

Visual

Approximately two acres of the wooded area at the corner of U.S. Route 1 and Station Avenue will remain unaffected by construction or operation of the proposed Terminal. The existing topography of the upper parcels drops significantly between U.S. Route 1 and the shoreline. Retention of these trees, which will continue to grow taller, in combination with the downward slope between U.S. Route 1 and the shoreline will limit views of the project from the west and south along U.S. Route 1. DCP has no plans to develop this area, nor would DCP be able to clear trees or develop the two-acre portion on the corner without prior approval from the MDEP or, should there be associated temporary or permanent wetland impacts, the USACE. In addition, the base of the largest structure at the facility, the Bulk Storage Tank, has been established at the lowest feasible elevation.

The approximately 3.5-acre Norvlaan parcel on Station Avenue will also remain unaffected by the project. DCP will not be able to clear the trees or develop this parcel of land without prior approval from the MDEP or, should there be associated temporary or permanent wetland impacts, the USACE. Retention of these trees will limit views of the project from the south.

In addition, the approximately six acres of forested upland between the existing railroad spur to the Mack Point Terminal and Long Cove will remain unaffected by the project. This will limit views of the project from the east and southeast. DCP has committed to establishing a conservation easement on this land that will prevent its development in perpetuity.

DCP will own undeveloped, forested land that will provide complete or partial visual screening from locations covering over 180 degrees around the terminal facility. Some of this land is along the Bay side which will be undisturbed. Visual screening will also be enhanced in most directions by existing tree cover on surrounding properties. The effect of these measures to minimize visual impact is demonstrated by the four computer-generated visual simulations of views of the developed site from various locations around the site. The locations selected for the visual simulations are representative of the views expected from nearby scenic resources, as defined by the Chapter 315 of MDEP regulations implementing the Maine Natural Resources Protection Act (NRPA). The visual simulations are provided in Appendix B.

The NRPA requires an applicant to demonstrate that a proposed activity will not unreasonably interfere with existing scenic and aesthetic uses. Chapter 315 requires visual impacts be minimized from nearby designated scenic resources. Scenic resources, as defined by the MDEP regulation, encompass:

*...public natural resources or public lands visited by the general public, in part for the use, observation, enjoyment, and appreciation of natural or cultural visual qualities. The attributes, characteristics, and features of the landscape of a scenic resource provide varying responses from, and varying degrees of benefits to, humans.*

Scenic resources within three miles of the site were evaluated and consist of a number of historic architectural structures listed on or potentially-eligible for listing on the National Register of Historic Places, the Atlantic Ocean (i.e., Long Cove and Penobscot Bay),

Mosman Park, a municipal park near downtown Searsport, and Moose Point State Park, located near the Searsport/Belfast town line. The visual simulations were focused on those scenic resources from which the terminal facilities would most likely be visible.

It should be noted that the visual simulations discussed above assumed that the base of the bulk storage tank would be at an elevation of 50 feet above mean sea level (MSL), and subsequent design modifications allowed the base of the bulk storage tank to be lowered to 44 feet MSL. As a result the height of the tank as shown in the visual simulations is approximately six feet higher than the proposed design and therefore slightly overestimates its visual impact.

Excerpts from the findings in DCP's Site Location of Development Act (Site Law) Permit are provided below. MDEP made these findings after review of DCP's visual impact assessment:

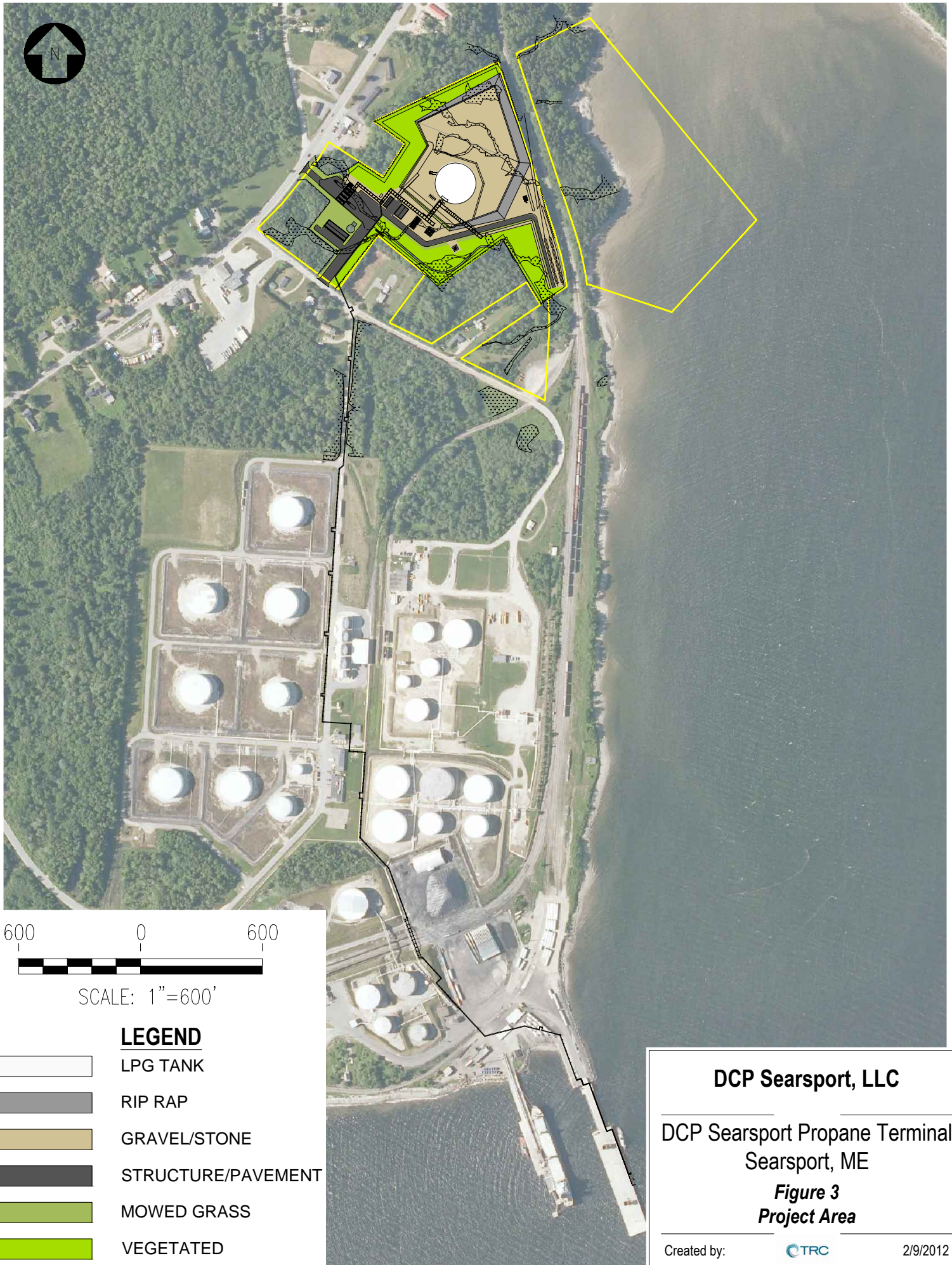
*In making a determination within the context of these rules, the Department considers the type, area, and intransience of an activity related to a scenic resource that will be affected by the activity, the significance of the scenic resource, and the degree to which the use or viewer expectations of a scenic resource will be altered, including alteration beyond the physical boundaries of the activity. In addition to the scenic resource, the Department also considers the functions and values of the protected natural resource, any proposed mitigation, practicable alternatives to the proposed activity that will have less visual impact, and cumulative effects of frequent minor alterations on the scenic resource.*

*The existing visual quality of the area within the DCP Terminal viewshed has two major elements: (1) the ongoing industrial, commercial and recreational marine activities on Penobscot Bay, most notably the heavy shipping traffic utilizing the two existing piers at the Mack Point Terminal, and (2) the existing commercial development and related tourism traffic mixed with residential development along this portion of US Route 1. The truck traffic and land-based activities at the Sprague and Irving facilities, an Irving Oil gas station and convenience store, as well as restaurants, motels and other commercial establishments dominate the immediate area around the proposed site. These existing land uses and activities have been present in this area for many years.*

*Therefore, the development, analyzed in the context of the existing and surrounding visual qualities and visual impact on scenic and aesthetic local resources is found to be acceptable without changes or compensation. Based on the project's location, design, and viewshed analysis, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.*

Within the operational area of the terminal, much of the property that will be clear cut for safety and security reasons will be re-established in native grasses. Entrances in to and out of the facility will be properly landscaped. Figure 3, entitled *Project Area*, which consists of a current aerial photograph of Mack Point and shows the proposed DCP facilities and color coding of the types of ground cover that will exist once the new facilities are constructed, demonstrates the





existing tree cover and other vegetation that will remain post-construction to provide buffers around the facility and that the DCP Terminal is consistent with existing land use on Mack Point.

DCP will continue to evaluate other visual minimization opportunities and welcomes any practical solutions that will help achieve that goal without interfering with the operation of the facility in a safe and secure manner and increasing other environmental impacts.

#### Noise

The facility is being designed to comply with the applicable provisions of the MDEP noise standards, which were promulgated to prevent unreasonable disturbance to neighboring residential or other noise sensitive properties. In accordance with Chapter 375 of MDEP regulations, DCP conducted measurements of existing noise levels near the project site to establish baseline conditions and then modeled the impact of additional noise levels expected to be generated during routine operations, based on a set of performance standards for each of the significant sources of noise expected to be at the site. The Maine Site Location of Development permit could not be issued without a finding that adequate provisions had been made to control noise, and MDEP is requiring that a compliance assessment plan (noise monitoring) be completed to confirm the facility is in compliance once it reaches full operation. Should the Terminal be determined to be out of compliance with the MDEP noise limits, within 60 days DCP must then submit another plan and a schedule for bringing the facility into compliance. DCP's MDEP Site Law permit contains the following finding:

*Based on the information provided by the applicant, the Department finds that the applicant has made adequate provisions to ensure that noise standards pursuant to the Site Location of Development Rules, Chapter 375 §10 are met provided that the applicant submits and implements a compliance assessment plan as described above.*

In addition, DCP has committed to meeting the MDEP noise standards during periods when the emergency generator is operating, which exceeds the MDEP requirements that apply to "routine operations." The flare, which is also not considered routine operation, will operate at essentially atmospheric pressure. DCP has never received a noise complaint at its Chesapeake, VA facility, which has an older flare and residences very close to the property line.

#### Odor

The propane odorizing system will be a closed system, designed to prevent the presence of detectible odor outside DCP property boundaries.

#### Light pollution.

Additional information regarding the minimization of light pollution is provided in response to Land Use Standard G: Lighting Design Standards on page 28, Site Plan Review Application Requirement A.1.m on pages 34 and 35, and Site Plan Review Performance Standard 9 on page 41.



**D) Cluster Development.** Not applicable.

**E) Home Occupations.** Not applicable.

**F) Industrial Performance Standards.**

1. Danger – The proposed DCP Searsport Terminal is subject to numerous industry standards and codes including those developed by the National Fire Protection Association (NFPA), American Petroleum Institute (API), and American Standards for Testing and Materials (ASTM). As a result, the terminal is being designed and will be operated in accordance with all applicable state and federal design codes and regulations. These engineering and industry codes and standards are well-established and stringent. A comprehensive listing of applicable design codes and standards is provided in Appendix C, a few of which are described below:

*NFPA 58 – Liquefied Petroleum Gas Code.*

NFPA 58 is the American National Standard for propane storage and handling. It covers the construction and installation of the large, atmospheric pressure tanks used to store refrigerated propane (by reference to API 620 and additional requirements) as well as pressurized storage tanks other than at refineries. It is used worldwide. It covers marine shipping and receiving including requirements for loading/unloading pipelines, minimum valve locations and inspections prior to transfer.

*American Petroleum Institute Standard 2510 – Design and Construction of Liquefied Petroleum Gas Installations.*

API 2510 covers the design construction of LPG terminals at marine terminals. The standard covers storage vessels, loading and unloading systems, piping, or and related equipment. Where the relevant requirements of NFPA 58 and API 2510 are not identical, the more stringent requirement will be used.

*American Petroleum Institute Standard 2510A – Fire-Protection Considerations for the Design and Operation of Liquefied Petroleum Gas (LPG) Storage Facilities.*

API 2510A covers the prevention and control of releases, fire-protection design, and fire-control measures in the design, operation, and maintenance of LPG storage facilities. The document states that the LPG storage vessel failure frequency, based on US, British, and German failure statistics for pressure vessels is 1 failure per 10,000 vessel years or longer. The standard provides fire protection from leaked LPG from piping and components attached to or near a pressure vessel.

*American Petroleum Institute Standard 620 – Design and Construction of Large, Welded, Low-Pressure Storage Tanks.*

API 620 covers the design and construction of large, field assembled, storage tanks of all types. It is used worldwide for large storage tanks at refineries, storage tank farms, propane terminals and LNG terminals and other fluids.

ASME B31.3 – Metallic Piping Fabrication and Examination Specification.

ASME B31.3 covers requirements for materials and components, design, fabrication, assembly, erection, examination, inspection, and testing of piping.

Propane has been in use in this country for a century, and the safety standards that have developed around the use of propane are well established. The use and marketing of propane for residential, commercial and industrial purposes began in the early 1900s. By 1927, total U.S. sales of propane exceeded 1 million gallons. By the 1930s the Compressed Gas Association (CGA) had established a set of safety recommendations. The recommendations were adopted in 1932 by the NFPA, which is one of the oldest and most authoritative fire and hazard safety organizations in the world (established in 1896). The NFPA is the leading organization that develops standards and codes covering subjects ranging from electrical fire safety, to building fire protection, to fire protection for flammable materials. The NFPA establishes consensus codes and standards, conducts research, and provides training and education. In the area of propane fire safety, the NFPA publishes NFPA 58, Liquefied Petroleum Gas Code, an American National Standard. Propane safety has historically been regulated at the state and local level, and NFPA 58 has been adopted in all 50 states and is used worldwide as the basis for state propane safety regulations. It represents the “gold standard” of safety rules for the storage and handling of propane in the U.S, and is continually reviewed and revised by technical committees which are comprised of safety professionals from manufacturers, the propane industry, the insurance industry, and government experts, and are subject to public comment every three years to ensure they are up-to-date and consistent with experience in the field and new technology.

Propane tanks such as the tank that will be used at the DCP terminal have been in service for decades without incidents. There are approximately 12 refrigerated bulk propane storage tanks currently in use in the United States. Bulk propane storage tanks are constructed of steel in accordance with API Standard 620 – Design and Construction of Large, Welded, Low-Pressure Storage Tanks, and any requirements of state and municipal authorities. The tanks are equipped and located as set forth in NFPA 58. Each storage tank, depending on size, is set a specified distance from other tanks, buildings, and property lines.

A “Boiling Liquid Expanding Vapor Explosion” (BLEVE) occurs when a vessel containing a **pressurized** liquid above its boiling point ruptures. For BLEVE to occur, the container has to be under pressure, the pressure has to exceed the strength of the container, and the container has to be weakened in some way (impact, corrosion, fire). It would be virtually impossible for the bulk propane storage tank proposed for Searsport to BLEVE.

DCP asked two independent technical experts, Mr. Theodore Lemoff, PE of TLemoff Engineering in Hingham, MA, and Dr. Phani Raj of Technology & Management Systems, Inc in Burlington, MA, to comment on the suitability of NFPA 58 and the other industry standards referenced above to ensure the safety and security of persons and property near refrigerated, low-pressure LPG storage tanks. Mr. Lemoff is a consultant in flammable gas safety and formerly a Principal Gases Scientist at the NFPA. Dr. Raj is a professor of chemical engineering and provides expert engineering services to the chemical,

petrochemical and natural gas industries on topics such as modeling of hazardous material release consequences, including fire effects. Dr. Raj has served on many technical advisory committees evaluating LPG, LNG and other flammable liquids safety including the NFPA.

Some of their conclusions include:

- The risks associated with refrigerated LPG storage facilities are very low and extremely remote;
- Refrigerated LPG storage facilities have a long and safe history in the U.S.;
- No explosion, including a vapor cloud explosion, has occurred at any refrigerated LPG storage facility anywhere in the world as a result of an LPG release;
- Cases are cited in the literature in which delayed ignition of a gasoline vapor cloud has caused explosive hazard; however, there are no such reported cases for dispersed vapor clouds generated by a refrigerated LPG spill;
- Large LPG fires are no different in radiant heat characteristics than gasoline or other petroleum product fires.

LPG storage facilities have an excellent safety record. In 1981, the Department of Energy published a report containing an analytical examination of fatal accidents involving propane gas transportation and storage between 1971 and 1979. The purpose of the investigation was to assess the risks associated with propane storage and transportation. According to this report, the individual risk is about the same as the risk of a person on the ground being killed by an airplane crash, and much less than the risk of death by lightning, tornadoes, or dam failures.

In 2006, Texas A&M University completed a study that examined propane-related accidents in the U.S. The study concluded that very few incidents and no fatalities occurred at propane storage and distribution facilities during the nine-year study period. This safety record is the result of 1) stringent standards and codes such as those in NFPA 58, 2) rigorous employee training and 3) the implementation of numerous, industry-recommended practices and procedures. Every propane storage facility is required to have an emergency system that, when activated, immediately stops the flow of propane. They are also required to prepare fire safety plans, emergency action, response and plant security plans. The Searsport Terminal will be built to the highest standards and its operators highly trained in both normal and emergency procedures.

#### DCP's Safety and Security Record

DCP Midstream is a leader in the midstream segment of the energy industry as one of the nation's top three natural gas gatherers and processors in the U.S. DCP Midstream is the largest natural gas liquids (NGLs) producer in the nation, and one of the largest marketers in the nation. The Company operates in 18 states and owns or operates 61 processing plants, 10 fractionators, and approximately 60,000 miles of gathering and transmission pipeline connecting to approximately 38,000 active receipt points. On a daily basis, DCP Midstream gathers and/or transports an average of approximately 7.1 trillion British thermal units (BTU) per day of natural gas; produces an average of 360,000 barrels per day of NGLs; and markets and trades an average of 480,000 barrels per day of NGLs.

With regard to propane, the Company operates an underground propane storage facility in Marysville, MI; LPG marine terminals in Providence, RI and Chesapeake, VA; and eight existing rail or truck wholesale LPG terminals across the Northeast. DCP Midstream is the premier wholesale marketer of propane in the Northeast, operating under the name Gas Supply Resources.

DCP is proudly committed to the safety and security of its facilities, employees, contractors and the local community. This commitment is demonstrated in the pledge from senior management, in the dedication of our employees and in our outstanding safety record.

#### DCP's Design and Construction

DCP has hired a well-known, well respected engineering firm, Matrix Service (Matrix), to design the facility. Matrix is a full service industrial contractor headquartered in Tulsa, Oklahoma, with regional offices in nine U.S. States and three Canadian Provinces. Matrix Service provides engineering, fabrication, construction, repair, and maintenance services to energy and industrial markets throughout the U.S. and Canada.

Matrix Service is a leader in the engineering, fabrication, and construction of aboveground storage tanks (AST) and specialty vessels. Since 1984 Matrix has provided tank and vessel construction and tank repair and maintenance services to the downstream petroleum and industrial gas industries including the design and construction of the Sea-3 terminal in Tampa, FL. Matrix's professionals are well versed in every aspect of the NFPA standards, API standards and American Society of Mechanical Engineers (ASME) code work in both atmospheric and pressure storage vessels. All tanks, specialty vessels, and tank appurtenances will meet NFPA 58, API 650, API 620, ASME, or American Water Works Association (AWWA) specifications. Additional information on Matrix Services is available at: <http://www.matrixservice.com/index.asp>.

When DCP builds the facility, they will be hiring qualified contractors. All contractors bidding on DCP projects must first complete extensive questionnaires on both safety and environmental programs and practices. In addition, DCP routinely audits contractors including their records and activities in the field. The contractors are required to provide the number of qualified personnel necessary to perform the functions specified in bid packages. The contractors cannot replace the project manager or any key project personnel without written approval from DCP. Work may be subcontracted; however, the contractors are responsible for ensuring that all subcontractors meet DCP safety, environmental and engineering standards.

#### DCP Operations

All DCP employees go through extensive environmental, safety, and operations training.

Safety training is a requirement of all employees, contractors and visitors to the site. DCP is subject to the OSHA standards with training that includes subjects such as confined space, hot work, Lockout/Tagout, hazard communication, etc. DCP has employees dedicated to safety, but also sets very high standards and accountability for all employees and contractors.

Environmental training includes training in spill prevention, waste management, and stormwater management. Operators are required to understand each of these subjects, how their activities may impact the environment, and how and when to install pollution control devices. DCP also maintains environmental specialists on staff to ensure routine operations and maintenance activities are in compliance with all federal, state and local regulations.

Operations personnel receive training in the proper operation of equipment. All operators participate in an Operator Qualification program which includes training in normal operating procedures, emergency procedures, and emergency response. DCP also maintains a drug and alcohol testing program.

This facility will be subject to both OSHA Process Safety Management (PSM) and U.S. Environmental Protection Agency (EPA) Risk Management Program (RMP). Based on the processes the facility would be subject to the RMP Program 3 which will require DCP to analyze both a worst-case release scenario and an alternative release scenario, implement a prevention program, implement an emergency response program and file a Risk Management Plan with EPA. The prevention program is identical to what OSHA would require under PSM and has 12 elements:

- Safety Information – DCP must 1) have up-to-date information on propane and propane equipment, 2) have MSDSs on site, 3) document the maximum intended inventory for propane equipment, and 4) have information of safe upper and lower temperatures, pressures, flows, and compositions.
- Process Hazard Analysis (PHAs) – DCP must conduct PHAs to identify the hazards associates with the equipment and propane, the possible malfunctions of equipment or human errors that could cause a release, the safeguards needed to control hazards or prevent malfunctions or errors, and any steps need to detect or monitor releases
- Operating Procedures – DCP must have written operating procedures describing the tasks operations must perform, safe process operating parameters that must be maintained, and safety precautions for operations and maintenance activities.
- Training – DCP must provide the National Propane Gas Association's Certified Employee Training Program and other training that meets U.S. Department of Transportation requirements.
- Mechanical Integrity (Maintenance) – DCP must prepare and implement procedures to maintain the on-going mechanical integrity of the propane equipment and must train maintenance workers in these procedures. DCP must also establish a schedule for inspecting and testing equipment associated with the storage facility.
- Management of Change – DCP must prepare and implement procedures to manage changes, to ensure that changes that are made do not create any new hazards and that employees and contractors are informed of the changes and trained in any new procedures that are needed prior to start-up.
- Pre-startup Reviews – DCP must conduct a pre-startup review whenever there is a new covered process or there is a modification to an existing process. The review is to ensure that the equipment is in accordance with the design specifications, that all procedures related to the equipment are up-to-date, and that employees have been trained in the operation of the new or modified process.

- Compliance Audits – DCP must certify that we have evaluated compliance with EPA’s requirements for the prevention program for each covered process at least every 3 years. The findings must be documented in a report. DCP must also determine and document an appropriate response to each finding and document that all deficiencies have been corrected.
- Incident Investigation – DCP must conduct an investigation for all incidents that have resulted in, or could have resulted in, a “catastrophic” release of propane. A report must be generated documenting the date of the accident and the date the investigation began, a description of the accident, the factors that contributed to the accident, and any recommendations that resulted from the investigation. The recommendations and findings must be shared with employees.
- Employee Participation – DCP must develop a written plan to implement the requirements for employee participation.
- Hot work permit – DCP must issue hot work permits for hot work conducted near covered process
- Contractors – DCP must implement a program to ensure that contractors performing maintenance, renovation, or specialty work on or near a covered process are qualified to perform the work and are informed of the potential hazards.

Almost all of DCP’s facilities are subject to both PSM and RMP regulations and DCP maintains very stringent programs including dedicated employees to maintain and implement both programs. The DCP Searsport facility will be in full compliance with these requirements.

DCP takes the security of its facilities seriously and has incorporated extensive security-related practices and programs into its overall business operations. The Searsport facility will be in full compliance with all Maritime Transportation Security Act (MTSA) requirements developed and enforced by the U.S. Coast Guard to ensure the security of the nation’s port facilities. Specifically, as part of its MTSA compliance for the Searsport facility, DCP will:

- Develop and submit to the Coast Guard a Facility Security Assessment (FSA) that identifies and evaluates any potential threats to critical assets and infrastructures, and general facility security vulnerabilities;
- Develop and submit a performance-based Facility Security Plan (FSP) to the Coast Guard that addresses, among other things, any vulnerabilities identified in the FSA. The FSP will describe, for the Coast Guard’s review and approval, how security measures will be implemented to ensure physical and personnel security. These measures will include, as appropriate, security patrols, restricted areas, access control measures, and/or surveillance equipment;
- Resubmit an updated FSP to the Coast Guard at five year intervals or whenever the plan is revised;
- Designate a Facility Security Officer (FSO) with responsibility for implementing the FSP and for conducting regular security training, drills and exercises;
- Participate in the appropriate MTSA Area Maritime Security Committee (AMSC) which serves to coordinate the activities of all port stakeholders including the Maritime Industry, the public, and other federal, local and state agencies; and

- Develop a control system to manage and to protect from public disclosure all information that is identified pursuant to MTSA as sensitive security information (SSI), including the security plans, vulnerability assessments and other information related to security plans, procedures or programs.

DCP will also implement and enforce at the Searsport facility the MTSA Transportation Worker Identification Credential (TWIC) program to prevent unauthorized individuals from gaining unescorted access to secure areas of the facility. Under the TWIC program, all individuals seeking unescorted access to secure areas of the facility (including employees, long-term contractors, and vendors) must undergo extensive background checks, including checks for terrorist ties, mental competency and criminal offenses. Any individual seeking access to a secure area of the facility must present a TWIC before access is granted. A TWIC must be obtained via the procedures established by TSA in 49 CFR Part 1572.

In addition to complying with extensive MTSA regulatory requirements, DCP is proud to be committed to providing a secure environment and will take the necessary steps to reduce the security risks that may be presented to the facility, employees and community. Demonstrating DCP's long-standing commitment to protecting the security of its facilities including DCP Searsport, DCP has adopted measures and controls that are consistent with those deemed by the federal government and industry to represent best practices for port facilities pursuant to the TSA "Pipeline Security Guidelines" (April 2011) and the API "Security Guidelines for the Petroleum Industry" (April 2005).

The engineering design and layout of all aspects of the proposed Searsport LPG Terminal, including minimum separation distances between on-site components, setbacks from the DCP property line and from off-site structures and roadways, as applicable, is and will be completed in full accordance with all safety, security, design and operational codes and regulations. DCP would not be proposing to build this facility at this location on Mack Point if it was not confident that compliance with these requirements could not be achieved.

2. Vibration - No perceptible vibration will be transmitted outside the DCP property boundaries during operation.

3. Wastes - No wastes will be discharged or dumped into any river, stream, watercourse, storm drain, pond, lake, or swamp. Wastewater will be discharged to the municipal sewer system in accordance with the Waste Discharge Permit to be issued by the Searsport Wastewater Superintendent. Solid or non-aqueous liquid wastes will be collected and stored on-site and disposed of off-site in accordance with applicable federal and state laws and regulations. The Maine Site Location of Development permit could not be issued without a finding that adequate provisions had been made for waste disposal.

The project will not result in new contaminant discharges to Long Cove.

Construction related turbidity in runoff during construction will be controlled by implementation of state of the art erosion and sedimentation control measures. These measures, which are incorporated in DCP's Erosion and Sedimentation Control Plan (the

E&S Plan) that has been approved by MDEP, are described in detail and shown on the project drawings submitted with this application.

There will be no discharge of process water to Long Cove or Penobscot Bay from operations at the LPG terminal. With respect to LPG offloading operations, the operations will be designed and managed to ensure no discharge into waters of the United States of LPG or other contaminants associated with the LPG offloading process. During transfer operations the International Gas Code (IGC) requires remotely controlled emergency shutdown valves on the ship for stopping liquid and vapor transfers between the ship and shore. Cargo pumps and compressors can be shut down automatically if the emergency shutdown system closes the emergency shutdown valves. There will be a remotely-operated shutdown valve at each cargo hose connection used in transfers. The emergency shutdown control system will be capable of being activated by a single control in either of two locations on the ship and will be activated by fusible links that will respond in the event of a fire in other locations, including tank domes and loading stations.

The secondary containment structure for the bulk LPG tank is designed to contain 100 percent of the full capacity of the tank. As a result there would be no discharge of LPG to Long Cove in the very unlikely event of a failure of the tank.

The only water discharge during terminal operation will be treated stormwater. DCP's proposed Stormwater Management and Treatment Plan and drawings (the Stormwater Management Plan), which were reviewed and approved by MDEP under Chapter 500 of their regulations, are provided in this application. The conclusions reached by the MDEP with regard to DCP's E&S and Stormwater Management Plans are provided below:

*An applicant for a Site Law permit is required to demonstrate the project meets the storm water management standards set forth in 38 M.R.S.A. § 420-D and Chapter 500 of the Department's rules. The proposed project includes approximately 3.3 acres of impervious area and 12.4 acres of developed area and discharges to the Atlantic Ocean. The applicant submitted a stormwater management plan based on the basic, general and flooding standards contained in Chapter 500. The proposed stormwater management system consists of underdrained soil filters.*

A. Basic Standards:

- (1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan (Section 14 of the application) that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the Department's Division of Watershed Management (DWM). Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.*
- (2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. This plan was*



reviewed by, and revised in response to the comments of, the DWM. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. The applicant will be responsible for the maintenance of all common facilities including the stormwater management system.

- (3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on DWM's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(A).

#### B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area.

The stormwater management system proposed by the applicant was reviewed by and revised in response to comments from the DWM. After a final review, DWM commented that the proposed stormwater management system is designed in accordance with the Chapter 500 General Standards provided that the design engineer inspects the site during the construction of the underdrained soil filters. Within 30 days of the completion of the project, the design engineer shall submit a notification to the Department that the stormwater management system was constructed and stabilized in accordance with the approved plans or, if the system constructed is inconsistent with the plans, submit a new plan for review and approval.

Based on the stormwater system's design, the plans submitted, and DWM's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500, General Standards.

#### C. Flooding Standard:

The applicant is proposing to utilize a stormwater management system based on estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software that utilizes the methodologies outlined in Technical Releases #55 and #20, U.S.D.A., Soil Conservation Service and detains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. The post-development peak flow from the site will be increased by an insignificant amount over the pre-development peak flow from the site and the peak flow of the receiving waters will not be increased as a result of stormwater runoff from the development site.

DWM commented that the proposed system is designed in accordance with the Chapter 500 Flooding Standard.

Based on the system's design and DWM's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter

500, Flooding Standard for peak flow from the project site, and channel limits and runoff areas.

The Department further finds that the proposed project will meet the Chapter 500 standards for: (1) easements and covenants; (2) management of stormwater discharges; and (3) discharge to freshwater or coastal wetlands.

No new contaminant discharges to Love Cove are expected to result from LPG vessels during offloading. The Mack Point Intermodal Cargo Terminal receives an average of approximately 136 vessels per year, with a maximum to date of 166 vessels in a single year. Four to eight LPG carriers will call at the terminal per year in connection with the DCP Searsport project. LPG carriers will, like other vessels calling at the terminal, will be required to comply with federal and international standards governing LPG shipping, including all applicable rules, regulations, and requirements of the Coast Guard. In addition, EPA regulates discharges incidental to the normal operation of commercial vessels, such as vessels calling at the Mack Point terminal, under the Vessel General Permit (VGP) to ensure compliance with the Clean Water Act. The VGP establishes effluent limits, best management practices, and other requirements including inspection, monitoring, recordkeeping, and reporting requirements. EPA and the Coast Guard work cooperatively to ensure VGP compliance.

4. Noise – As described in more detail in the response to Land Use Standard C on pages 14 and 18, topography and remaining forest cover will help to reduce noise impacts on surrounding properties, although compliance with noise standards will be also accomplished through use of appropriate noise abatement measures in the facility design and when selecting the motorized and fuel burning equipment that will be installed.

**G) Lighting Design Standards.** All exterior lighting is being designed to minimize adverse impact on neighboring properties by limiting the location, design and amount of exterior lighting to avoid off-site illumination to the extent allowed by safety and security requirements. Exterior lighting will be directed inward and toward the ground or Terminal operational areas. The only lights required on the bulk storage tank are for the stairway that provides access to the top of the Bulk Storage Tank. The superstructure of the tank will not be lit. The Federal Aviation Administration has determined that the tank is not tall enough to require lighting for aircraft safety. Much of the exterior lighting, such as the tank stairway lighting, will be turned on only during periods when terminal personnel are working in the area.

**H) Manufactured Housing.** Not applicable.

**I) Signs**

1. Facility signs will be designed and located to avoid a traffic, sight, health or welfare hazard; or result in a nuisance due to illumination, placement, display, or obstruction of existing signs.

2. Signs in the downtown area. Not applicable.

3. Off Premise Signs: All signs will be located on DCP property.

4. Exempt Signs: Not applicable.

**J) Towers.** This section deleted at 2012 Town Meeting.

**K) Transient Accommodations: “Bed and Breakfast”.** Not applicable.

**L) Windmills.** This section deleted at 2012 Town Meeting.

### **Other Requirements**

Section VI of the Land Use Ordinance contains the following additional requirements with which all new development subject to approval under the Land Use Ordinance must comply.

**F. Other Permits Required Before Approval.** DCP has received all other required state and federal permits and licenses needed for construction and operation of the proposed Terminal. A copy of each of these permits is provided in Appendix D. The following is a listing of the required state and federal permit/license approvals:

- MDEP Site Location of Development Act Permit;
- MDEP Natural Resources Protection Act Permit and Clean Water Act Section 401 Water Quality Certification;
- MDEP Air Emission License;
- MDOT Driveway/Entrance Permit; and
- USACE Section 10 Rivers and Harbors Act and Clean Water Act Section 404 Permits.

**G. Positive Findings Required.** Approval shall be granted by the Planning Board, after receipt of a complete application, only upon a positive finding by the Planning Board that the proposed use:

1. Is a permitted use in the district in which it is proposed to be located. The proposed DCP Terminal is a ‘Bulk Fuel Distribution Facility-Wholesale,’ which is a permitted use in the Industrial Zone. The administration building and associated developed area is ‘Professional Offices/Office Complex,’ which is a permitted use in the Commercial Zone.

2. Is in conformance with the applicable performance standards of Section V of this Ordinance. See Land Use Standards, pages 13 through 29.

3. Will not result in unsafe or unhealthful conditions. As demonstrated in Other Requirement F, above, DCP Terminal has received all required state and federal environmental permit approvals, a Driveway/Entrance Permit for the facility exit drive onto U.S. Route 1, and will be operated in accordance with the requirements of those approvals. See also Land Use Standard C, on pages 14 through 18, and F on pages 19 through 28.

4. Will not result in undue land, water or air pollution. There will be no discharge to land or water resulting from the operation of the proposed Terminal. In issuing the Clean Water Act Section 401 Water Quality Certification, the MDEP concluded that the project will not cause or contribute to any violation of state water quality standards. For additional information regarding the discharge of wastes from the facility to land or water, see Industrial Performance Standard F.3 on pages 25 through 28.

Air emissions will be controlled in accordance with Best Available Control Technology (BACT) and other requirements of the Maine Air Emission License. Calculations that quantified the maximum potential air emissions from all stationary sources of air pollutants at the facility were provided in DCP's air emission license application, and included the emissions from combustion (the propane heaters, flare, emergency generator and fire water pump) as well as the fugitive emissions of propane from truck and rail car loading, ship unloading, and all LPG, diesel fuel and ethyl-mercaptan storage tanks. In issuing the Air Emission License, MDEP concluded that the new source will be equipped with Best Practice Treatment of air emissions (in this case BACT), will not violate applicable emissions standards, and, in combination with other existing sources of air pollutants, will not violate ambient air quality standards. As a result, the MDEP has concluded that the cumulative effects of the air emissions from the proposed Terminal, when taken into consideration with existing air quality in the area, will not be a risk to public health or welfare.

5. Will not result in undue erosion or sedimentation. Erosion and sedimentation will be controlled during construction in accordance with the Erosion and Sedimentation Control Plan (the E&S Plan) submitted to and approved by the MDEP and USACE. Following construction, erosion and sedimentation will be controlled by adherence to the Stormwater Management Plan submitted to and approved by the MDEP. The approved Stormwater Management Plan includes post-construction inspection and maintenance requirements. DCP's written E&S and Stormwater Management Plans are provided in Appendices E and F of this application, respectively. The associated Erosion and Sedimentation Control and Stormwater Management Plan drawings are provided in Appendix G. For additional information regarding the E&S and Stormwater Management Plans, see Industrial Performance Standard F.3 on pages 25 through 28.

6. Will avoid problems associated with development in flood hazard areas. The only portion of the proposed development that will be located in a flood hazard area is a short portion of the LPG transfer pipe. The transfer pipe is being designed to withstand the effects of flooding that may occur and will have no effect on the elevation or location of the existing flood zone, as evidenced by the attached application for a Flood Hazard Management Permit prepared in accordance with the Floodplain Management Ordinance. In issuing the Maine Site Location of Development permit, MDEP found that the project will not unreasonably cause or increase the flooding of the area to be altered or adjacent properties and will not create an unreasonable flood hazard to any structure.

7. Will not result in damage to spawning grounds, fish, aquatic life, bird and other wildlife habitat. Construction and operation of the Terminal will not result in undue adverse impacts to spawning grounds, fish, aquatic life, bird and other wildlife habitat, as evidenced by the

granting of state and federal permits. Consultations with state and federal natural resource agencies conducted as part of the state/federal permit application process indicated that there are no rare, threatened or endangered species or unique plant or animal habitat on the site. The Maine Department of Inland Fish and Wildlife (MDIFW) noted that Tidal Waterfowl and Wading Bird Habitat (TWWH) does occur east of the site along the estuarine fringe of Long Cove. However, MDIFW concluded there would be no direct impacts from the project on the TWWH, as long as stormwater runoff is managed in accordance with state regulations. These agency findings were confirmed during on-site surveys by qualified biologists from TRC.

Existing conditions at and adjacent to the corner of Station Avenue and U.S. Route 1 in Searsport define and control the presence of wildlife and fisheries. Absent from the site are: high or moderate deer wintering areas, habitat for threatened or endangered species, nesting sites for bird colonies, and vernal pools. Although the site is wooded and undeveloped, it is surrounded by U.S. Route 1, Station Avenue, and the Montreal, Maine, and Atlantic Railroad tracks leading to the existing Mack Point Terminal. As a result the site is not readily linked to other habitat of equal or better quality, and is instead closely surrounded by intensive and persistent commercial and industrial activity. Wildlife and fisheries lifecycles will not be adversely affected by construction and operation of the proposed DCP Terminal.

Construction and operation of the Terminal will result in the unavoidable alteration of approximately two acres of freshwater wetland and approximately 1,000 linear feet of an associated stream channel. Due to the steep gradient and low flows within the stream channel as well as the hanging culvert at its the lower end beneath the railroad tracks, fish and shellfish habitat in the stream is absent or would be of very low quality. Other functions and values of this stream/wetland complex are similarly considered to be absent, of low value or limited function, or unaffected by the project. Nevertheless, DCP will compensate for impacts to on-site wetlands and the associated stream segment by providing compensatory mitigation in the form of an in-lieu fee to the MDEP, and by completion of a supplemental mitigation project to replace an undersized and improperly installed culvert at the Old County Road crossing of Long Cove Brook.

The Maine Department of Marine Resources responded that it does not appear there would be any potential impacts to marine resources from the Terminal and transfer pipe provided erosion and sedimentation control Best Management Practices are followed during construction, and that potential adverse impacts from ship traffic are addressed in the U.S. Coast Guard Waterway Suitability Assessment. Construction and operation of the DCP terminal will not result in any discharge to Long Cove that would affect the quality or quantity of shellfish in Long Cove or the ability of harvesters to access the mudflats for harvesting should they choose to do so, with the possible exception of the four to eight times per year when an LPG vessel may be docked at the Sprague pier. In an email from the DCP Project Manager to the Friends of Clammers in the Searsport area, it states: "DCP Midstream has no intention of restricting access to the mud flats in Long Cove, unless we are required to do so by the Coast Guard during the times that our ships are docking." The planned conservation easement for the land and tidal areas to be owned by DCP east of the railroad spur will not restrict access or its use for shellfish harvesting.

For additional information regarding discharges to land or water, see again Industrial Performance Standard F.3 on pages 25 through 28.

8. Will conserve significant natural, archaeological and historical resources. A summary of the lack of significant natural resources on the site and the compensatory mitigation for unavoidable impacts to on-site wetlands and a stream segment are described above. Similarly, no significant archaeological resources are known to occur on the site as evidenced by consultations with The Maine Historic Preservation Commission (MHPC). An Architectural Survey Report was prepared to address potential impacts to historic structures in the project vicinity and was submitted to the MHPC for its review and concurrence. Following review of the Architectural Survey Report the MHPC concluded that "...there will be no historic properties [architectural or archaeological] adversely affected by the proposed undertaking..." which is a finding that must be made prior to the issuance of the state and federal environmental permits.

9. Will not adversely impact the public infrastructure. See Land Use Standard B, page 14, with respect to public roads. DCP has received written concurrence from the Searsport Wastewater Superintendent and the Searsport Water District that adequate provisions have been made to incorporate the project into existing or planned public infrastructure. Correspondence with the Wastewater and Water Districts is provided in Appendix H.

10. Be consistent with the long-range goals of the Comprehensive Plan, other adopted plans of the town, and the goals and purposes of the established districts. See Land Use Standard A, pages 13 and 14.

**I. Certificate of Occupancy Required.** If necessary as directed by the Searsport Code Enforcement Officer, DCP will obtain a certificate of occupancy from the Code Enforcement Officer prior to initiation of operations at the Terminal.

**COMPLIANCE WITH THE SITE PLAN REVIEW ORDINANCE  
FOR THE TOWN OF SEARSPORT, MAINE**

**SECTION V. Site Plan Review Application Requirements**

A. The Site Plan of Development Application for all except home occupations shall include the following items:

1. A map or maps prepared at a scale of not less than 1 inch to 50 feet and shall include:

a. Name and address of the applicant or his/her agent, name of the proposed development and identification of any land within 500 feet of the proposed development in which the applicant has title or interest. See Pre- and Post-Development Site Plans: Appendix A.

b. Boundaries of the tract of land certified by a registered land surveyor. See Pre-Development Site Plan: Appendix A

c. Existing soil conditions as described by a registered soil scientist, geologist or engineer. See soils and geotechnical reports provided in Appendix I and soils map (Pre-Development Drainage Plan) provided in Appendix G.

d. Copies of pertinent municipal tax maps with lot numbers and names of abutting property owners. See tax map and associated abutters list provided in Appendix J.

e. Location of existing and proposed buildings and other structures, including use and proposed use thereof. See Pre-Development and Post-Development Site Plans.

f. Location, size and elevation of buildings on abutting properties or within 200 feet of the property line of the proposed development. See Pre-Development and Post-Development Site Plans.

g. Location of existing public streets. See Pre-Development and Post-Development Site Plans.

h. Location and design of proposed access drives to the lot from public streets. See Post-Development Site Plans.

i. Location, design and arrangement of proposed off-street parking and loading areas and their appurtenant drives and maneuvering areas. See Post-Development Site Plans.

j. Location of existing and proposed pedestrian walkways. Not applicable.

k. Location of existing and proposed utilities and easements including sanitary sewage, water, electricity and public rights-of-way. See Pre-Development and Post-Development Site Plans.

l. Location of existing natural drainage ways and proposed storm drainage facilities including dimensions of culverts, pipes, etc. See Pre- and Post-Development Drainage Plans provided in Appendix G.

m. Location, intensity, type, size and direction of all outdoor lighting. The DCP Terminal will require outdoor lighting for both personnel safety and facility security purposes. Typically



lighting is provided at all exits and in process areas such as the truck loading station, around the storage tank valving, stairways and LPG pumps to provide safe working conditions. Lighting is needed on other facility components and piping to assist in the detection of leaks. All lighting is directed downward and inward with minimal off site illumination. The Proposed Lighting Plan developed for the Terminal facility is provided in Appendix K. The illumination from the facility lights, as portrayed in the lighting plan, represents the worst case scenario since much of the safety lighting for operational areas such as the stairway that goes up the side of the tank will not be turned on unless operations personnel are working in the area. Additional information regarding exterior lighting is provided in response to Land Use Standard G on page 28.

n. Location and size of signs and all permanent outdoor fixtures. See Post-Development Site Plans.

o. Landscape plan showing location, type and approximate size of plantings and location and dimension of all fencing and screening. See Post-Development Ground Cover Plan: Appendix A.

p. Contour lines at appropriate intervals to show the effect on the land of existing and proposed grades. See Pre- and Post-Development Drainage Plans: Appendix G.

q. Location of any affected groundwater aquifers and aquifer re-charge areas. As provided in Section V(A) of the Site Plan Review Ordinance, DCP respectfully requests that the Planning Board waive this item as groundwater aquifers and aquifer re-charge areas will not be affected by this project.

2. Written statements that consist of:

a. Evidence title and interest in the property, or evidence that the applicant has entered into a binding purchase and sales agreement in the property covered by the application. Right, title or interest documentation is provided in Appendix L.

b. A description of proposed uses of the site. See Project Description and Purpose, pages 1 through 9.

c. Total floor area and ground coverage of each proposed building and structure and the percentage of lot covered by each building or structure. The following table provides this information.

Building/Structure (Site Plan ID #)	Floor Area/Ground Cover (square feet)	% of Industrial Lot	% of Commercial Lot
Bulk LPG Tank Containment Area (16)	257,560	29.9	-
Bulk LPG Storage Tank <sup>(a)</sup> (12)	32, 040	3.7	-
Compressor Building (8)	2,710	0.3	-
Recondenser (9)	1,860	0.2	-

Building/Structure (Site Plan ID #)	Floor Area/Ground Cover (square feet)	% of Industrial Lot	% of Commercial Lot
Product Heaters (10)	1,460	0.2	-
Flare (11)	610	0.1	-
MCC Building (7)	1,120	0.1	-
Truck Loading Station (4)	3,960	0.5	-
Odorant Skid (5)	370	<0.1	-
LPG Fuel Storage Tank (20)	1,370	0.2	-
Rail Loading Station (21)	8,240	1.0	-
Odorant Skid (18)	370	<0.1	-
Administration Building (1)	4,750	-	2.9
Fire Water Tank <sup>(b)</sup> (2)	1,260	-	0.8
Fire Water Pump (3)	360	-	0.2

<sup>(a)</sup> Also included in the Bulk LPG Containment Area

<sup>(b)</sup> If needed

d. Description of existing and proposed easements, restrictions and covenants placed on the property. An existing 50-foot wide easement containing an underground oil pipeline that has not been used for many years traverses the northwest corner of the 3.8-acre commercial lot and will be unaffected by the proposed development. This pipeline was formerly used to transport aircraft fuel from the Mack Point Terminal to the Loring Air Force Base in Limestone, Maine. The easement grants to the holder the right to construct, maintain, repair, operate, patrol, replace and/or remove a pipeline with all fittings and appliances; the right to trim, cut fell and remove all trees and underbrush and obstructions and any other vegetation, structures or obstacles within the ROW; and the right to construct, maintain, repair, operate, replace and/or remove at any time an additional line or lines.

DCP's purchase and sale agreement with Sprague Energy (provided in Appendix L) includes provisions (an "easement corridor") for locating the transfer pipe on Mack Point Terminal property from the existing Dry Cargo pier to the property to be owned by DCP. Once DCP has completed the purchase of the terminal property from Sprague Energy, it intends to place a conservation easement on the approximately 20.1-acre parcel of forested upland and tidal wetland and mudflat east of the existing railroad spur. No other new easements are proposed for the property to be owned by DCP.

e. Method of solid waste disposal. A description of DCP's proposed methods of solid waste disposal, as approved by the MDEP, is provided in Appendix M.

f. Erosion and sedimentation control plan. DCP's written E&S Plan, as approved by the MDEP and USACE, is provided in Appendix E. The locations of erosion control measures to be implemented during construction and erosion control detail drawings and notes are provided in Appendix G.

g. Where the proposed development site includes or is within 100 feet of the shoreline of tidal waters, a determination of whether this shoreline is currently eroding. Approximately 525 linear feet of the transfer pipe will be within 100 feet of tidal waters, not including the portion

that will be attached to the pier. This shoreline, which is part of the existing Mack Point Terminal, is currently heavily rip rapped and very stable.

h. Copies of letters to the abutting property owners, Selectmen, Town Manager, Public Works Director, Fire Chief, Police Chief, MSAD #56 School Superintendent, and Searsport Water and Sewer District Superintendent notifying them of the proposed development. DCP hosted an Open House on December 14, 2010, at the Searsport Town Hall. The Open House was advertised in the Bangor Daily News on November 26, 2010, and the Republican Journal on December 1, 2010, and DCP sent a copy of the notice that was published in the newspapers to all abutting landowners. The abutters list is provided in Appendix J. This meeting also served as the Public Informational Meeting required by MDEP regulations. DCP personnel and its environmental and legal consultants representing all aspects of the proposed facility were available at various locations within the meeting room, and attendees were given the opportunity to discuss our proposal in detail, ask questions, and raise concerns. DCP hosted a second Open House at the Searsport Town Hall on March 2, 2011. The second Open House was advertised in the Bangor Daily News and the Republican Journal on Feb 26, 2011 and again on March 1, 2011. Based on comments from the first Open House, the format was changed to include a formal presentation followed by a question and answer session with the same DCP representatives and consultants. Copies of the Open House newspaper and abutter notices, sign-in sheets, presentation information and handouts, as well as DCP's Notice of Intent to File the Maine Site Location of Development Act and Natural Resources Protection Act permit applications, are provided in Appendix N. Approximately 40 people attended each Open House and the discussions included both positive and negative comments.

A third Open House was held on January 26, 2012 at the Town Hall in Searsport. This event was advertised in the Republican Journal, additionally DCP issued an automated phone call to 1335 Searsport residents. Representatives of DCP provide short summaries of the project including the need for the facility, permitting, jobs, and safety. The public was then invited to ask questions. Copies of the sign-in sheets from that meeting are also included in Appendix N.

Additionally, DCP opened an office in Searsport so that concerned citizens can stop by at their convenience to ask questions and/or express concerns, hired local residents to go door-to-door sharing facts about the facility, took out a full page ad in the Bangor Daily News on November 19, 2011, continues to participate in interviews in the most widely distributed newspapers and TV stations covering the midcoast area, has web site ([www.propaneformaine.com](http://www.propaneformaine.com)) and Facebook page ([www.facebook.com/pages/Propane-for-Maine](http://www.facebook.com/pages/Propane-for-Maine)) dedicated to sharing facts.

Letters sent to the Searsport Water and Sewer District Superintendents and their responses to those letters are included in Appendix H. Letters received from the Searsport Fire, Police and Ambulance Service/EMS Chiefs as well as the Searsport Emergency Management Director are also provided in Appendix H. Numerous other formal and informal conversations have occurred between DCP representatives and other Town officials, including DCP attendance at

several Planning Board and Selectmen meetings, to inform them about the project and gather input regarding its affect on community services.

i. Statement of financial capacity which should include the names and sources of the financial parties, including banks, government agencies, private corporations, partnerships and limited partnerships, and whether these sources of financing are for construction loans or long term mortgages, or both. DCP's documentation of its financial capacity to construct and operate the project is provided in Appendix O.

j. List all applicable local, state and federal ordinances, statutes, laws, codes and regulations pertaining to the development of the site. See Zoning Districts and Applicable Standards on page 10, and Other Permits Required Before Approval on page 29. A list of design and operating codes and requirements is provided in Appendix C with additional discussion provided in Land Use Industrial Performance Standard F on pages 19 through 28.

k. The applicant's evaluation of the availability and suitability of off-site public facilities, including sewer, water, streets, parking, solid waste and schools. See Appendix H for correspondence with the water and sewer district superintendents, and Appendix M for DCP's evaluation of the availability of waste disposal services.

With regard to public schools, during routine operations DCP expects to have approximately 12-14 full time employees at the Terminal. A similar number of specialized contract workers could be needed in areas such as security and various trades. Many of the full time employees and contract workers will be hired from the local area. Most construction workers will be locally hired. As a result, the increased demand on public schools will be insignificant.

During routine operations, the small increase in daily commuting traffic noted above will be insignificant compared to the existing traffic on U.S Route 1 and Station Avenue. Increases in daily commuting traffic during construction will be short-term and is not expected to result in an increase in public road congestion or public road damage for the same reasons, as discussed below, the additional truck traffic during operation is not expected to result in an increase in public road congestion or public road damage.

The most significant potential impact from Terminal-related traffic would be from the LPG trucks that would be filled at the terminal's truck load-out station and would then transport their product to various distribution points in Maine. For air permitting purposes, the maximum number of LPG trucks entering and leaving the terminal per year was assumed to be 9,000. In reality, the likelihood of reaching 9,000 LPG trucks in any one-year period is extremely small, given that this would require that the Terminal's maximum possible annual throughput is realized and that all of the product leaves the Terminal by truck, with none leaving by rail. The maximum number of trucks that utilize the Terminal annually will be considerably less. In comparison, the number of trucks currently entering and exiting the existing Mack Point Terminal alone, which currently serves both the Irving Oil Corporation tank farm and the Sprague Energy Corporation tank farm and dry cargo storage facility, is estimated at approximately 20,000 per year on average with up to approximately 30,000 trucks per year as a maximum.

A more meaningful assessment of LPG truck traffic is the anticipated daily maximum of 50 to 60 trucks, which would only occur during the peak of the heating season, when tourist traffic is at its lowest. In addition, all 50 to 60 of these trucks would not represent additional traffic in Searsport, since many LPG delivery trucks already use this portion of the highway to distribute LPG from other locations in Maine and would now be picking up their cargo in Searsport rather than driving straight through. During the summer tourist season, truck traffic entering and exiting the terminal is expected to be approximately 12 to 15 trucks per day. Supplying the Maine market from Searsport would reduce overall miles traveled on Maine's highways by trucks delivering propane.

Traffic data compiled by the Maine Department of Transportation and available through its Bureau of Transportation Systems Planning estimate the annual average daily traffic volume on U.S. Route 1 near the terminal site in 2010 at approximately 10,500 vehicles per day, over 800 of which were commercial truck traffic with more than two axles. Based on this annual daily average, the total annual traffic volume on this portion of Route 1 is approximately 3.8 million vehicles, nearly 300,000 of which are multi-axle trucks.

An increase of approximately 50 trucks per day utilizing this portion of U.S. Route 1 and Station Avenue primarily during the winter months, compared to the existing commercial truck and other traffic, will not result in additional congestion or damage to public roads. Similarly, there will be no noticeable change in the time of day that the local truck traffic occurs since both the Sprague and Irving facilities currently operate 24/7.

DCP does not expect to need off-site parking facilities during construction. However, should supplemental parking be required off-site during construction, DCP will utilize existing, private parking areas in the area. There will be no need for off-site parking facilities during operation.

l. A statement from the Fire Chief as to the availability of fire hydrants and/or fire ponds, or other provisions for fire protection services. DCP has discussed the measures to provide adequate fire protection with the Searsport Fire Chief on several occasions. The Fire Chief's recommendations have been incorporated into the facility design. DCP will continue to work with the Fire Chief to ensure adequate provision for fire protection services is available. A statement from the Fire Chief regarding the adequacy of the hydrant system and Fire Department readiness is provided in Appendix H.

m. If public water is to be used, a statement from the water district as to the availability of public water. See Appendix H.

n. If public sewer is to be used, a statement from the sewer district as to the availability of public sewer. See Appendix H.

o. A statement from the public works director that the proposed road or street construction will meet town specifications. Not applicable. No public road or street construction is required. The transfer pipe to the pier will be installed by boring under Station Avenue. Nevertheless, a

typical cross section of the proposed entrance and exit driveways and paved traffic areas within the Terminal is provided on Roadways Sections and Details drawing in Appendix A.

p. An estimate of the date when construction will start and development will be completed. As stated previously, construction of the DCP Terminal is expected to begin as soon as possible in 2012 and take approximately 18 months of active construction to complete for full operations using LPG distribution by truck. The schedule for construction of the rail car loading facility is unknown at this time.

B. Home Occupations. Not Applicable.

## **SECTION VI. Performance Standards**

1. Preserve and Enhance the Landscape. DCP has preserved the existing tree cover and will enhance the landscaping of the developed site as much as practicable, given the constraints imposed by the size of the parcel and facility safety and security requirements. Three significant forested areas on property to be owned by DCP will remain unaffected by construction or operation. These three areas are at the corner of U.S. Route 1 and Station Avenue (approximately 2 acres), the former "Norvlaan Parcel" on Station Avenue (approximately 3.5 acres), and the approximately six acres of forested upland between the railroad spur and Long Cove. The trees in these areas will remain and continue to grow taller. Cleared areas around the facility will be re-vegetated following construction to the extent allowed by operating requirements. The Post-Development Ground Cover Plan located in Appendix A shows the locations of areas to be re-vegetated and the areas to remain forested. Figure 3 is a visual depiction of the post-construction ground cover that will be present.

2. Relationship of the Proposed Buildings to the Environment. To the extent allowed by the size and shape of the available land and facility safety and security requirements, DCP has attempted to site proposed buildings and structures to fit harmoniously with the surrounding terrain and existing buildings within the vicinity which could have a view of the developed site. Additional details are provided in Performance Standard 1, above, Land Use Standard C on pages 14 through 18 and Positive Findings 6, 7 and 8 on pages 30 through 32. Computer-generated visual simulations of the developed site from various locations around the site are provided in Appendix B.

3. Vehicle Access. See Land Use Standard B on page 14, the MDOT Driveway/Entrance Permit in Appendix D, and Application Requirement A.2.k on pages 38 and 39.

4. Parking and Circulation. The layout and design of the DCP Terminal provides for one way vehicular circulation for the most heavily used interior roadways, ample parking/waiting areas for truck traffic to avoid the need for trucks to be parked on public roads, a separate truck loading area that does not interfere with interior circulation, a separate parking area for employees, and for movement by foot within the facility for employees. This design will provide for safe general interior circulation and parking. No unattended public vehicular or pedestrian traffic will be allowed within the Terminal.

5. Surface Water Drainage. The site civil engineering design has incorporated control and treatment of stormwater runoff in accordance with the MDEP regulations. DCP's Stormwater Management Plan (Appendices F and G) was reviewed and approved by the MDEP as part of the Site Location of Development permitting process. Implementation and adherence to the Stormwater Management Plan will ensure that surface waters will not adversely affect neighboring properties, downstream water quality, soil erosion, or slope stability. See Land Use Industrial Performance Standard F.3 on pages 25 through 28 for additional information.

6. Existing Utilities. The development will not impose an unreasonable adverse effect on sewers, sanitary and storm drains, water lines or other public utilities. Central Maine Power Company and has assured DCP that adequate power is available to operate the DCP facilities at all times of year without risk to the availability of power for the grid. For additional details see Land Use Positive Finding 9 on page 32, and Appendix H for correspondence with the water and sewer district superintendents.

7. Advertising Features. DCP will have two signs, each approximately four feet long by three feet high, that will be located at the facility entrance and exit drives. The signs will not require lights. The signs will be placed close enough to lights otherwise needed for the facility entrance and exit drives so that the signs will be visible without the need for dedicated lighting. The signs will not detract from the design of the proposed buildings and structures and the surrounding properties.

8. Special Features of the Development. See Performance Standards 1 and 2, above; Land Use Standards C, F and G on pages 14 through 18 and 28; and visual simulations in Appendix B.

9. Exterior Lighting. All lighting will be directed downward and inward with minimal off site illumination. This design will minimize adverse effects on neighboring properties. See also Land Use Standard G on page 28, Application Requirement A.1.m on pages 34 and 35, and the Proposed Lighting Plan provided in Appendix K.

10. Emergency Vehicle Access. The design of internal roadways, vehicle circulation and parking described in Performance Standard 4, above, will provide for convenient and safe emergency vehicle access to all buildings and structures at all times.

11. Municipal Services. The development will not have an unreasonable adverse effect on municipal services, including the municipal road system, fire department, police department, solid waste program, sewage treatment plant, schools, open spaces, recreational programs and facilities, and other municipal services and facilities. For additional details and documentation see Land Use Standards B and F.3 on pages 14 and 25; Positive Finding 9 on page 32 and Appendix H correspondence; Application Requirement A.2.e on page 36 and Appendix M; and Application Requirement A.2.o on pages 39 and 40.

12. Water Pollution. Adequate provision has been made to prevent an unreasonable adverse effect on the water quality. See Land Use Performance Standard F.3 on pages 25 through 28 and Positive Findings G.3, 4, 5, 7 and 8 on pages 29 through 32; Application Requirements A.2.e, f, and g on pages 36 and 37 and Appendices L and E; Application Requirements A.2.k and n on

pages 38 and 39; Performance Standards 5 and 6 above; and the Post-Development Drainage Plan and Erosion Control Notes and Details in Appendix G.

13. On Site Water Supply. Not Applicable. There will be no on-site water supply.

14. Soil Erosion. The development will not cause unreasonable soil erosion, or a reduction in the capacity of the land to retain surface water resulting in a dangerous or unhealthy condition. See Land Use Positive Findings G.3, 4 and 5 on pages 29 and 30; Appendix E and the Post-Development Drainage Plan and Erosion Control Notes and Details in Appendix G; Application Requirement A.2.g on pages 36 and 37; and Performance Standard 5 above.

15. Septage Disposal. Not applicable. There will be no on-site septage disposal.

16. Adverse Effects. The development will not have unreasonable adverse effects on the scenic or natural beauty of the area, historic sites, important wildlife habitats or rare and irreplaceable natural areas. See Land Use Standards C and G on pages 14 through 18 and 28, and Positive Findings G. 7 and 8 on pages 30 through 32.

With respect to property values, no one can predict what will happen with property values if DCP builds the propane facility. Property values are dependent on numerous factors such as:

- Physical condition – general wear and tear, updating and cosmetic elements (peeling paint, overgrow landscape, etc.), structural elements (garages, leaking roofs);
- Functionality – number and size of rooms, current trends (open floor plans, etc.);
- Location - percentage of vacant or tenant occupied properties or location near blighted properties, crime, convenient services (shopping, restaurants, etc.);
- Availability – supply and demand;
- Surrounding community – both positive (scenic views) and negative (derelict buildings, vacant overgrown properties);
- Local economy – taxes, jobs; and
- Zoning.

The most obvious point about property values in Searsport is that, when the facility is built, it will be located next to existing tank farms on land already zoned for industrial use. That in and of itself makes clear that there should be very little, if any, effect on property values. Studies conducted to evaluate the effect of wind farms, quarries, nuclear facilities, etc., all of which are potentially far more intrusive if placed near residential areas or within rural communities than the DCP facility, have not found any consistent evidence that property values have declined as a direct result of the development. DCP supported the recent amendment to the Site Plan Review Ordinance that made consideration of effect on property values a component of the Planning Board's review criteria.

17. Financial Capacity. DCP's demonstration of financial and technical capacity to meet the above performance standards is provided in Appendices O and P, respectively.



## **SECTION VII. General Provisions**

D. Application Fee. The combined application fee in the amount of \$659.40 for Site Plan Approval, a Shoreland Zoning Permit, and a Flood Hazard Development Permit is attached to this application.

## **COMPLIANCE WITH THE SHORELAND ZONING ORDINANCE FOR THE TOWN OF SEARSPORT**

## **Shoreland Zoning Districts Affected**

Structures built on, over or abutting a dock, wharf or pier, or located within 250 horizontal feet of areas affected by tidal action are subject to the Shoreland Zoning Ordinance. Approximately 750 feet the transfer pipe will be located within 250 feet of Long Cove. An additional approximately 565 feet of the transfer pipe will be located over Long Cove, attached to the existing Dry Cargo Pier at the Mack Point Terminal. Therefore these portions of the transfer pipe will be within the Shoreland Zone. In addition, the proposed railcar loading facility and the end (approximately 270 linear feet) of its associated access road will also be located within the Shoreland Zone.

These portions of the transfer pipe, railcar loading facility and its associated access road will be located in the General Development District, as defined by the Shoreland Zoning Ordinance.

It should be noted that of the approximately 20.1-acre parcel of upland, tidal wetlands and mudflat that will be owned by DCP east of the existing railroad spur, approximately six acres consists of forested upland. Of the six acres of forested upland, approximately 5.8 acres falls within the Shoreland Zone, except for approximately 0.2 acre which is zoned as Industrial. The approximately 5.8 acres within the Shoreland Zone is a designated Resource Protection District. No development is planned for any of this land however, and DCP intends to place a conservation easement on this land once the purchase from Sprague Energy is completed.

The portions of the project area that lie within Shoreland Zoning Districts are shown on the Post-Development Site Plan and Piping Key Plan located in Appendix A.

## **Permitted Land Uses**

Pursuant to the Table of Land Uses in Section 14 of the Shoreland Zoning Ordinance, the railcar loading facility and transfer pipe fall under the category of permitted Industrial uses in the General Development District providing approval of the Planning Board is obtained. Construction of the portion of the access road to the railcar loading facility within the General Development District is also a permitted use providing approval of the Planning Board is obtained. Other associated development such as clearing for approved uses, and earthmoving are also permitted uses.

## **Permit Application Requirement**

Sections 11, 14 and 16 of the Shoreland Zoning Ordinance require that an application be submitted to the Planning Board for review and approval for the portions of the proposed development that are located within the Shoreland Zone. DCP's Shoreland Zoning Application is provided in this document.

## **Section 15. Land Use Standards**

A. Minimum Lot Standards. Lot 56 is a 19.8-acre pre-existing lot of record of which approximately 1.1 acre or approximately 6 percent is located in the Shoreland Zone adjacent to tidal areas, which acreage exceeds that required by the ordinance. The minimum shore frontage requirement is not applicable as Lot 56 does not have any water frontage and is not contiguous

with any other lot to be owned by DCP that has water frontage. As a result it is a conforming lot with respect to the Shoreland Zoning Ordinance and can be built upon provided all other provisions of the Shoreland Zoning Ordinance are met.

B. Principal and Accessory Structures.

1.a. All structures associated with the DCP Terminal will be set back more than 25 feet from the normal high water line of Long Cove with the exception of approximately 765 feet of the transfer pipe, 565 feet of which is attached to the pier. The transfer pipe is exempt from the setback requirement since it is a functionally water-dependent use requiring direct access to the water as an operational necessity.

1.b. Intentionally left blank.

1.c. Not applicable. The proposed development will not occur on a Coastal Bluff as mapped by the Maine Geological Survey.

1.d. Not applicable. The development will not occur on a non-conforming lot that contains an existing residential structure.

2. Not applicable. No development is proposed in Resource Protection, Limited Residential, Limited Commercial, or Stream Protection Districts.

3. Not applicable. There are no floors, basements or opening associated with structures proposed to be located in the Shoreland Zone.

4. Not applicable. Development proposed in the General Development District adjacent to tidal waters is exempt from the footprint requirement.

5. Any retaining walls needed will meet the 25-foot setback requirement to the normal high water line of Long Cove.

6. Not applicable. No stairways are required for access to the shoreline.

C. Structures and Uses Extending Over or Below the Normal High Water Line.

1. Not applicable. No new access from the shore will be required.

2. Not applicable. There are no existing beaches at the Mack Point Terminal.

3. Use of the existing pier and established shipping channel will minimize or avoid adverse effects on fisheries.

4. The transfer pipe will be no larger than necessary to safely and efficiently offload LPG from ships to the bulk storage tank, and is consistent with the surrounding character and uses of the Mack Point Terminal.

5. The transfer pipe will be located above the normal high water line.

6. Not applicable. A new pier is not proposed.

7. Not applicable. Conversion of an existing structure to residential use is not proposed.

8. Not applicable. Development in the General Development District is exempt from the structure height limit.

D. Campgrounds. Not applicable.

E. Individual Private Campgrounds. Not applicable.

F. Commercial and Industrial Uses adjacent to Great Ponds. Not applicable.

G. Parking Areas. Not applicable. No parking areas are proposed within the Shoreland Zone.

H. Roads and Driveways. Approximately 270 linear feet of the maintenance road for the rail car loading station would be located in the Shoreland Zone.

1. The portion of the maintenance roadway for the rail car loading area that is located in the Shoreland Zone is more than 75 feet (in actuality more than 150 feet) from the normal high water line of Long Cove.

2. Expansion of existing public roads. Not applicable.

3. New Roads and Driveways in the Resource Protection District. Not applicable.

4. The banks of the roadway will be no steeper than two horizontal to one vertical, and will be graded and stabilized in accordance with the provisions DCP's E&S Plan, which was approved for the project by the MDEP. See response to Section 15.Q below, DCP's written E&S Plan provided in Appendix E of this application, and the Post-Development Drainage Plan and Erosion and Sedimentation Control Notes and Details drawing located in Appendix G.

5. No portion of the roadway will have a slope greater than 10 percent.

6. In order to prevent roadway surface drainage from directly entering water bodies, tributary streams or wetlands, surface water drainage will be managed in accordance with DCP's Stormwater Management Plan, which was approved for the project by the MDEP. DCP's written Stormwater Management Plan is provided in Appendix F of this application and the associated Pre- and Post-Development drainage Plans are provided in Appendix G.

7. All ditches and swales will be designed, constructed and stabilized to prevent erosion and sedimentation of water bodies and wetlands in accordance with DCP's approved Stormwater Management Plan.

8. All ditches, swales, culverts and other stormwater runoff control structures will be maintained on a regular basis to assure effective functioning in accordance with DCP's approved Stormwater Management Plan.

I. Signs. Not applicable. There will be no signs placed in the Shoreland Zone.

J. Stormwater Runoff. The proposed DCP Terminal will be designed, constructed and maintained in accordance with DCP's approved Stormwater Management Plan to minimize storm water runoff from the site in excess of the natural predevelopment conditions.

K. Septic Waste and Gray Water Disposal. Not applicable.

L. Essential Services. Not applicable.

M. Mineral Exploration and Extraction. Not applicable.

N. Agriculture. Not applicable.

O. Timber Harvesting. Not applicable.

P. Clearing or Removal of Vegetation other than Timber Harvesting. There will be no disturbance in a Resource Protection District and no clearing or removal of vegetation will occur in the General Development District within 75 feet from the normal high water mark except for that necessary to install the footings to support approximately 370 feet of the transfer pipe. Any such removal of vegetation within 75 feet of the normal high water mark will occur in existing developed areas of the Mack Point Terminal. Any other removal of vegetation or cutting of trees within the General Development District will be limited to only that necessary for the development.

All other provisions of Section 15.P are not applicable.

Q. Erosion and Sedimentation Control. Construction and operation of the DCP Terminal will be in accordance with the MDEP-approved E&S Plan (Appendices D and F) and Stormwater Management Plan (Appendices E and F). Implementation of these plans meets or exceeds the requirements of this provision of the Shoreland Zoning Ordinance.

R. Soils. Existing soil conditions as described by a Maine Certified Soil Scientist and Maine Registered Professional Engineer are provided in Appendix I. These reports conclude that any soils limitations can be overcome through the use of standard best engineering practices.

S. Water Quality. See responses to Land Use Ordinance Land Use Standard F.3 on pages 25 through 28 and Positive Findings G.3, 4, 5, and 7 on pages 29 through 32; and Site Plan Review Performance Standard 12 on pages 41 and 42 25.

T. Archaeological Sites. See response to Land Use Ordinance Positive Finding G.8 on page 32.

**Section 16C. Permit Application Requirements**

1. Every applicant for a permit shall submit a written application, including a scaled site plan, on a form provided by the municipality, to the appropriate official as indicated in Section 14. The appropriate fee, as determined by a fee schedule promulgated by the Municipal Officers upon Planning Board recommendation, shall accompany said application. DCP's written application for a Shoreland Zoning Permit for the portions of the Searsport Terminal that would be located within the Shoreland Zone is included in this document. Completed application forms are located at the beginning of this document. Scaled project drawings showing the portions of the project within the Shoreland Zone are provided in Appendix A. The combined application fee in the amount of \$659.40 for Site Plan Approval, a Shoreland Zoning Permit, and a Flood Hazard Development Permit is attached to this application.
2. All applications shall be signed by an owner or individual who can show evidence of right, title or interest in the property or by an agent, representative, tenant, or contractor of the owner with authorization from the owner to apply for a permit hereunder, certifying that the information in the application is complete and correct. This application is signed by Michael S. Richards, Secretary of DCP Searsport, LLC. In addition, a copy of the letter from DCP authorizing TRC to act as its agent to obtain the necessary authorizations for the Searsport LPG Terminal is located at the beginning of this document, immediately following the application forms.
3. All applications shall be dated, and the Code Enforcement Officer or Planning Board, as appropriate, shall note upon each application the date and time of its receipt. The date of this application, April XX, 2012, is shown on TRC's transmittal letter to the Planning Board located at the front of this document.
4. If the property is not served by a public sewer, a valid plumbing permit, including the site evaluation approved by the Plumbing Inspector, shall be submitted whenever the nature of the proposed structure or use would require the installation of a subsurface sewage disposal system. Not applicable. Connection to the Searsport Sewer District system is proposed.

**Section 16D. Procedure for Administering Permits**

After the submission of a complete application to the Planning Board, the Board shall approve an application, or approve it with conditions, if it makes a positive finding based on the information presented that the proposed use:

1. Will maintain safe and healthful conditions. See Land Use Ordinance Land Use Standard F.1 on pages 19 through 28 and Positive Finding G.3 on page 29.
2. Will not result in water pollution, erosion, or sedimentation to surface waters. See Land Use Ordinance Land Use Standard F.3 on pages 25 through 28 and Positive Findings G.3, 4, 5, 7, and 8 on pages 29 through 32; Site Plan Review Application Requirements A.2.e, f, and g on pages 36 and 37 and Appendices K and D, and Site Plan Review Application Requirements A.2.k and n on pages 38 and 39; Site Plan Review Performance Standards 5 and 6 on page 41; and the Post-Development Drainage Plan and Erosion Control Notes and Details in Appendix G.

3. Will adequately provide for the disposal of all wastewater. See Site Plan Review Application Requirement A.2.n on page 39 and Appendix H.
4. Will not have an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat. See Land Use Ordinance Positive Finding G.7 on pages 30 through 32.
5. Will conserve shore cover and visual, as well as actual, points of access to inland and coastal waters. See Land Use Ordinance Land Use Standard C on pages 14 through 18, Site Plan Review Performance Standards 1 and 2 on page 40, and visual simulation from Sears Island in Appendix B. There will be no change in points of access to inland and coastal waters.
6. Will protect archaeological and historic resources as designated in the comprehensive plan. See Land Use Ordinance Positive Finding G.8 on page 32.
7. Will not adversely affect existing commercial fishing or maritime activities in a Commercial Fisheries/Maritime Activities district. Not applicable. The project is not located in a Commercial Fisheries/Maritime Activities district. See also Land Use Ordinance Positive Finding G.7 on pages 30 through 32.
8. Will avoid problems associated with flood plain development and use. See Land Use Ordinance Positive Finding G.6 on page 30 and the attached application for a Flood Hazard Management Permit.
9. Is in conformance with the provisions of Section 15, Land Use Standards. See Shoreland Zoning Land Use Standards on pages 45 through 48, above.



## **COMPLIANCE WITH THE FLOODPLAIN MANAGEMENT ORDINANCE FOR THE TOWN OF SEARSPORT**

**FEMA Flood Zone Affected**

In accordance with Article II of the Floodplain Management Ordinance for the Town of Searsport (the Floodplain Management Ordinance), before any construction or other development begins within any areas of special flood hazard, a Flood Hazard Development Permit must be obtained from the Code Enforcement Officer. As determined from the Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM), approximately 820 feet of the transfer pipe will be located within Flood Hazard Zone VE, 565 feet of which will be located along the pier above Long Cove, and an additional approximately 125 feet of the transfer pipe will be located within Flood Hazard Zone AE. As a result, this portion of the transfer pipe is subject to the Floodplain Management Ordinance, and a Flood Hazard Development Permit must be obtained. The information provided in this section, along with the supporting documentation referenced from other portions of this document constitute DCP's application for a Flood Hazard Development Permit.

There are no reasonable alternatives to locating the transfer pipe in the mapped flood zone since it is intended to transfer the LPG from the vessels at the existing pier to the storage tank located well outside any special flood hazard area. The amount of ground disturbance associated with installation of the pipe supports will be small and limited to the immediate vicinity of the support placements. DCP's proposed construction within the flood zone is therefore not anticipated to have any impact on flood levels given the insignificant potential displacement of flood water by the pipe supports. As such, the new pipe would not result in any significant changes to flood levels.

**Article III – Application for Permit**

The application for a Flood Hazard Development Permit shall include:

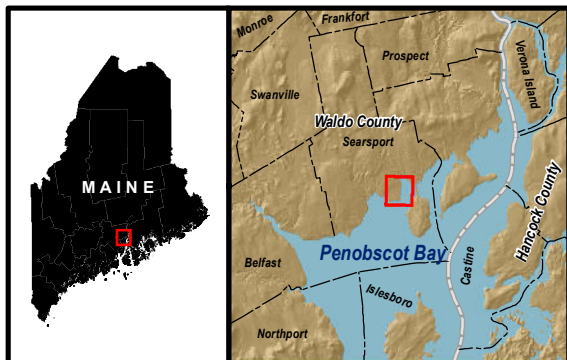
A. Name and address of the applicant.

DCP Searsport, LLC  
370 17<sup>th</sup> Street, Suite 2500  
Denver, CO 80202  
Attention: David Graham

B. An address and map indicating the location of the construction site. The portions of the transfer pipe that lie within Flood Hazard Zones VE and AE are shown on Figure 4.

C. A site plan showing the location of existing and/or proposed structures, sewage disposal and water supply facilities, areas to be cut and filled, and lot dimensions. The locations of all Project facilities, including the transfer pipe, are shown on the Post-Development Site Plan and Piping Plans located in Appendix A. Existing structures and lot dimensions are shown on the plans. There are no structures, as defined in Article XIII of the Floodplain Management Ordinance, or areas of cut and fill proposed within the special flood hazard area. The Project will connect to the existing municipal sewage and water supply systems.





#### LEGEND

- Site Boundary
- FIRM Zone AE Boundary (14' MSL)
- FIRM Zone VE Boundary
- Transfer Pipeline
- County Boundary (MEGIS)
- Town Boundary (MEGIS)

Data Sources: Maine Office of GIS (MEGIS), Orthophoto Date: 2003.  
Floodplain information: FEMA Flood Insurance Rate Maps (FIRM)  
Projection: NAD83, UTM Zone 19N, Grid North.

## DCP SEARSPORT, LLC

DCP Searsport Propane Terminal  
Searsport, Maine

**Figure 4:**  
**FEMA Floodplain Boundary Map**

Created by:  4/4/2012



- D. Statement of intended use of the structure. Not applicable. There are no structures, as defined in Article XIII of the Floodplain Management Ordinance, proposed within the special flood hazard area.
- E. Statement of Sewage System Type. Not applicable. No sewage system is proposed.
- F - H. Dimensions and elevations of proposed structures. Not applicable. No structures are proposed within the special flood hazard area.
- I. Written certification by a registered land surveyor that the elevations shown on the application are accurate. Placing the registered land surveyor's stamp on the Pre-Development Site Plan (located in Appendix A) indicates the surveyor's certification that the elevations shown on the application drawings are accurate.
- J. Certification of floodproofing methods.
1. Non-residential structures. Not applicable.
  2. Construction in coastal high hazard areas. The Project drawings in Appendix A, including the Piping Plans, are stamped by a registered professional engineer from Matrix Service, Inc., the design engineering firm. Placing the engineer's stamp on the drawings indicates design engineer's certification that all facility components are designed in accordance with all applicable federal and state codes, regulations and standards.
- K. Water Course Alteration. There will be no alteration of any watercourse within the special flood hazard area.
- L. Compliance with Article VI. Compliance with the applicable standards in Article VI – Development Standards is presented in the following section.

## **Article VI - Development Standards**

- A - D. Design/Materials/Construction Standards, Water Supply, Sanitary Sewage Systems, On-Site Waste Disposal. Not applicable. Standards A – D all apply to structures located in a special flood hazard area.
- E. Watercourse Carrying Capacity. Not applicable. The carrying capacity of a watercourse will not be affected.
- F - H. Residential, Non-Residential, Manufactured Homes. Not applicable.
- I. Floodways. Not applicable. The carrying capacity of a watercourse will not be affected.
- J. Not applicable. Standard J applies to structures located in a special flood hazard area.
- K. Coastal Floodplains
- 1 & 2. Not applicable. These standards apply to new construction of structures.
  - 3a. Not applicable. A registered professional engineer has reviewed the Coastal Construction Manual and has confirmed it applies to the design and construction of residential buildings in coastal areas, not to a pipe. The transfer pipe and pipe supports will be designed to withstand the loads and load combinations defined in ASCE 7-05, Minimum Design Loads for Buildings and Other Structures, including the Flood Loads.

- 3.b. Not applicable. This standard applies to structures.
- 4. Use of Fill for Structural Support. Not applicable. Structural support for the pipe will be provided by steel pipe racks.
- 5 & 6. Alteration of Sand Dunes and Use of Enclosed Areas. Not applicable.

## **Article VII – Certificate of Compliance**

### **A. Elevation Certificate.**

- 1. Not applicable. A registered surveyor has reviewed the Elevation Certificate (FEMA Form 81-31) requirements and confirmed with FEMA that it is used only to certify building elevations. This form is not applicable to a pipe, since a pipe does not meet FEMA's definition of a covered building.
- 2. Not applicable. Article VII. A. 2 applies to structures.

**B & C.** Article VII. B and C apply to structures.

**APPENDIX A**  
**Pre- and Post-Development Site Plans**  
**Post-Development Ground Cover Plan**  
**Cross Section and Detail Plans**  
**Piping Key Plan**  
**Piping Cross Section and Detail Plans**  
  
**(bound separately in Volume II)**

## **APPENDIX B**

### **Visual Simulations**

## **APPENDIX C**

### **List of Design Codes and Standards**



## **APPENDIX D**

### **State and Federal Permits**

**APPENDIX E**  
**Erosion and Sedimentation Control Plan Narrative**

## **APPENDIX F**

### **Stormwater Management Plan Narrative**

**APPENDIX G**  
**Pre- and Post-Development Drainage Plans**  
**Cross Sections and Details**  
**Erosion Control Notes and Details**  
  
**(bound separately in Volume II)**

## **APPENDIX H**

### **Correspondence with Searsport Town Officials**

## **APPENDIX I**

### **Soils and Geotechnical Reports**

## **APPENDIX J**

### **Tax Map and Abutters List**

**APPENDIX K**  
**Proposed Lighting Plan**

**(bound separately in Volume II)**



**APPENDIX L**  
**Right, Title and Interest Documentation**

## **APPENDIX M**

### **Solid Waste Disposal Plan**

**APPENDIX N**  
**Notice Sent to Abutters**

## **APPENDIX O**

### **Financial Capacity Documentation**

## **APPENDIX P**

### **Technical Capacity Documentation**