TOWN OF BALDWIN PLANNING BOARD MINUTES 12/10/15

Attendance: Jo Pierce, Norm Blake, Matt Fricker, David Strock Meeting opened at 7:00 p.m.

Minutes of prior meeting read. Motion to accept the minutes as read was made and passed unanimously.

First Item: Steve Sanborn's Questions Regarding Map 10, Lot 31G

Mr. Sanborn wanted to discuss the status of land on Douglas Hill Road, Map 10, Lots 31 - 31H. Mr. Sanborn states that Lots 31E, 31F, and 31H were consolidated into a single owner and that the road, Sanborn Estates Road, runs from Douglas Hill Road to Lot 16. After a brief discussion of the history of Lots 31F and 31G, the Board discussed whether to make any findings of fact regarding the status of Lot 31G, a 2.9 acre parcel which has more than 200 feet of frontage on Sanborn Estates Road. Page Map 10 is attached as #1.

A motion was made by Jo Pierce on the following two findings of fact:

(1) The Planning Board finds that Map 10, Lot 31G meets the requirements of a buildable lot under the Baldwin Land Use Ordinance; and
 (2) The Planning Board finds that Map 10, Lot 31G is not part of a tract of land that is a subdivision under the Baldwin Subdivision Ordinance.

After discussion, the Board unanimously passed both findings of fact.

Second Item: Dodge Oil

Norm Blake provided a little history regarding Dodge Oil's appearance at the meeting. He stated that Jay Banks came to the Board several months earlier to discuss the concept of a second 30,000 gallon tank at the Dodge Oil site on Route 113.

After review the current CUP (attached as #2), the Board realized that Dodge Oil had not fulfilled all the requirements of the prior CUP conditions, including providing the Town Fire Department a burn off kit and several thousand feet of 4 inch hose. After that meeting, working with the Town Fire Department, Dodge Oil paid for an equivalent amount of 5 inch hose (the type current used by the Fire Department). Norm stated that the burn off kit had not been provided, so under Section 8.1 of the Ordinance, the Board could not consider a new CUP application by Dodge Oil at the same location.

Jay Banks, representing Dodge Oil, indicated there may be concerns about who could use such a kit and stated that there was a burn off kit in the building on the property. He

asked if Dodge Oil could share that one with the Town. After a discussion, Mr. Banks agreed to provide the burn off kit for the use of the Town Fire Department.

Norm then asked about the current work at the facility, including the concrete pad that had been poured. It appeared to be in preparation for a new tank. Mr. Banks stated that the individual working on the project, D.R., had passed away, so he hired a second person who had to start over. The new person had obtained the approval of the State Fire Marshall's office (Peter Holmes), and the Town of Baldwin's Fire Chief (Jason Brown). Mr. Bank said that he got ahead of himself with the concrete pad and making arrangements for the tank to be delivered. Mr. Banks suggested that he called the Town Office and an unnamed person told him he could go ahead. He apologized for getting ahead of the process.

Mr. Banks submitted three documents to the Planning Board: (1) Fire Safety Analysis for Dodge Oil & Propane by Jody Pratt Ameden of Energy Consulting LLC; (2) a draft Conditional Use Permit Application; and (3) a Proposed Propane Tank Layout. These documents are attached as #3 - #5, respectively.

After a very brief review of the documents, Norm stated that the Planning Board could not accept the CUP, but we could discuss the project and talk about the Board's expectations. Norm mentioned the following items:

- The Board will need detailed drawings and descriptions of the various safety systems at the facility.
- Norm referenced the propane storage facilities in Standish on Route 113 and in Gorham on Route 25. Both of these facilities have full perimeter fencing. We may need to discuss the need to such fencing at the Dodge Oil facility. Mr. Banks indicated that they did not put anything in the storage trailers on the back of the property because they had been broken into in the past.
- We will want to hear from Fire Chief Brown to understand the ability of Baldwin Fire Department to respond to a problem at the facility and the impact of another tank. Mr. Banks said that the plan was to install a water cannon apparatus, but they were still working on the piping issues.
- Norm stated that the Board would want to see an evacuation plan and how it would be implemented. He asked whether there were any audible or visual alarms at the facility to alert individuals in the area of a hazard. Mr. Banks said that the facility has many redundant safety systems.

Mr. Banks stated that the answers to these issues were contained in the report that he submitted to the Board. There was a general discussion about the durability and safety of the propane tanks, the potential hazards with the tanks, and the potential issues from vandalism, stray bullets, and industrial accidents.

Norm stated that the procedure going forward would be as follows. First, Dodge Oil needed to get the burn off kit to the Fire Department. Once that happened, Dodge Oil could submit a CUP application (including paying the fee) and the Board would schedule

Page 2 of 3

an initial site walk. Norm polled the Board to confirm that they were agreeable to conduct the site walk with a bit of snow on the ground since the items we are looking at are above ground. After the site walk, the Board will hold a public hearing to discuss the CUP application and, either at the meeting or another, the Board would consider the CUP application.

David asked about the other uses on the property, including the kerosene and #2 fuel storage at the facility. Mr. Banks indicated that he felt these items were not part of this project. David stated that the number of uses in close proximity to each other raised an issue. He also noted that the Board only had one permit from Dodge Oil. He asked whether Mr. Banks had a CUP for the other uses and, if so, asked that he provide the Board any permit that he had for the kerosene, diesel and other #2 fuel tanks. David also asked Mr. Banks to provide the dates on which each of the tanks at the facility had been installed. Mr. Banks stated that the Fire Marshall had approved the new 30,000 gallon tank in proximity to the other items, so he did not see how they were connected to the current project. David asked that the information and documents be provided.

Mr. Banks confirmed with Norm the additional items that he needed to provide (identified on the bullet points above) and thank the Board and the members of the public for their time.

Third Item: Modifications to the Extraction Provisions of the Ordinance

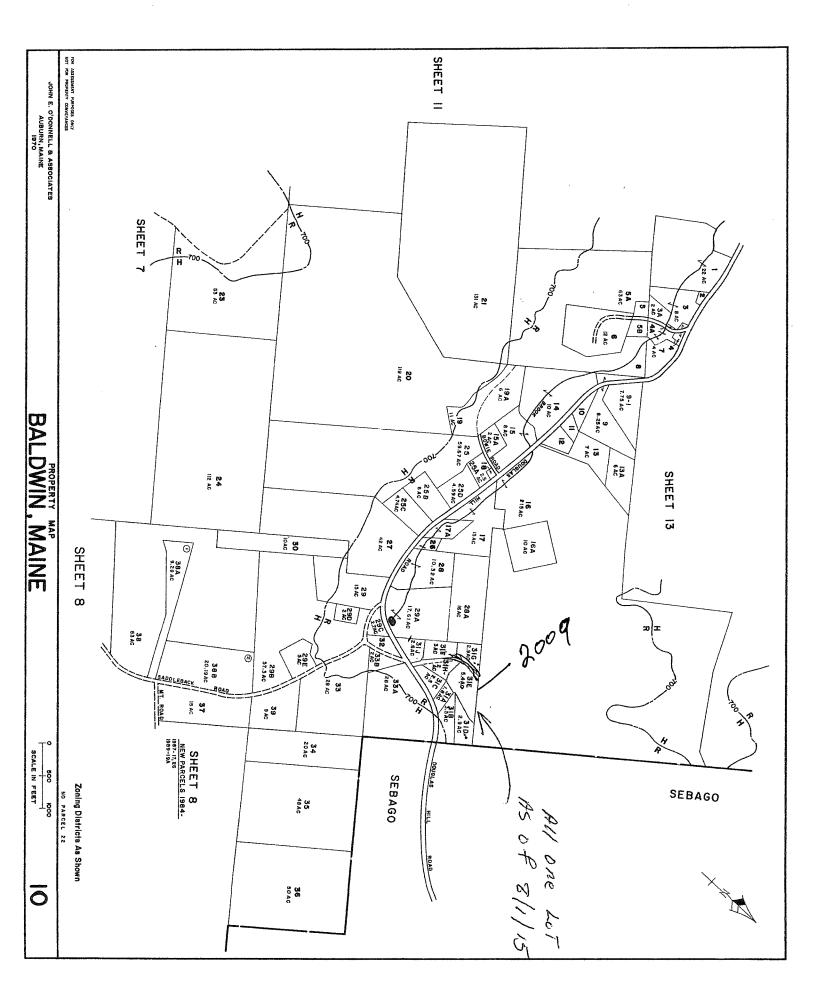
As promised, Norm provided the Board members with a proposal regarding possible changes to the Extraction provisions of the Ordinance, based in part on suggestions from the Town attorney and Jo Pierce. A copy of the proposed changes is attached as #6.

Norm agreed to discuss the proposal with the Selectmen and the Board would consider it further at a future meeting.

Fourth Item: Baldwin School Committee

Kathy Pierce informed the Board of the Baldwin School Committee and asked several general questions about how to approach potential uses at the former Baldwin Consolidated School facility. The Board engaged in a general discussion regarding the CUP process and the major issues that typically arise.

Final Item: Motion to Adjourn at about 9:33, which passed unanimously.



FO TOWN USE DATE APPL CATION RECEIVED: RECEIVED B FEE PAID: NAME:

FI 00 17

#2

TOWN OF BALDWIN, MAINE APPLICATION FOR CONDITIONAL USE PERHIT

Applicants for a Conditional Use Permit TO:

The Land Use Ordinance of the Town of Baldwin allows the Planning Board to grant a Conditional Use Permit for those uses listed specifically as Conditional Uses in the District Regulations (Article VII) of the code. Before granting a permit, the Board must find that the standards contained in Article IX, Section 3 have been met. It is your obligation to submit the necessary materials to allow the Planning Board to, determine if those standards have been met. Three copies of the completed application and supporting materials and the applicable fee shall be submitted to the Code Enforcement Officer.

SECTION A. Basic Information (to be completed by all applicants)

- Applicant's Legal Name: Dodge Oil Co., Inc. 1.
- 2. Applicant's Mailing Address:
- 3. Phone number where applicant (207) 839-5536 can be reached during business hours:
- 4. Are you the owner of record of the property for which the Conditional use Permit is sought?
- To apply for a Conditional 5. Use Permit, you must have legal right, title or interest in the property. Please indicate your interest in the property and attach written evidence of this interest.

79 New Portland Road Gorham, Maine 04038

yes (go to question 8)

XX no (answer questions 5, 6, and 7)

Dodge Oil Co., Loc. leases the property from DANJA Corp.

Dodge Oil owns fuel (petroleum) storage facility on the property.

- 6. Property Owner's Name:
- 7. Property Owner's Address:
- 8. Location of the property for which the permit is sought.
- 9. Indicate the correct Map and Lot number for the property from the Town's assessment records.
- 10. Zoning District in which the property is located: (check as many as apply)
- 11. List the use for which a Conditional Use Permit is being sought. Please refer to the District Standards of Article VI. The proposed use must be specifically listed as a Conditional Use in the District in which it is located.
- 12. Attach the following information to this application:

DANJA Corp.
22 Hillview Road Gorham, Maine 04038
Route 113 Baldwin, Maine
Map _1 Lot

- Natural Resource Protection Highlands Rural
- XX Village Commercial

Bulk Propane Storage Facility

(Petroleum Fuel)

- XX a. A written description of the proposed use of the property. This statement shall describe the exact nature of the proposed use.
- XX b. A location map showing the location of the property with respect to roadways and major natural features. Take map should allow the Board to locate the parcel in the field and on the Town's zoning and tay maps.
- XX_c. An accurate, scaled drawing of the lot showing the location of any existing or proposed buildings, structures, natural features, driveways and parking areas.

For each item, please indicate by checking that item that it has been included with your application.

- c. the capacity of the street network to accommodate the proposed use;
- d. the capacity of the storm drainage system to accommodate the proposed use.
- e. the ability of the town to provide necessary fire protection services to the site and development.
- 13. The natural characteristics of the site, including topography, drainage, and relationship to ground and surface waters and flood plains, shall not be such that the proposed use when placed on the site will cause undue harm to the environment or to neighboring properties.

For each item, please indicate by checking that item that it has been addressed by your submission.

XX.

XX

XX

SECTION C. Compliance With Shoreland Standards (to be completed only if any portion of the property is located within 250 feet of the normal high water mark of Ingalls Pond, Sand Pond, Southeast Pond, Adams Pond or the Saco River or within 75 feet of any stream.)

You are responsible for providing the Board with sufficient information to allow it to determine that the Standards of Article IX, Section 4 are met. For each standard, you should attach a written statement demonstrating how the proposed use complies with that standard. Each standard must be addressed in your submission. The standards are:

N/A	1.	will not result in unreasonable damage to spawning grounds, fish, aquatic life, bird and other wildlife habitat;
<u>N/A</u>	2.	will reasonably conserve shoreland vegetation;
_N/A	3.	will reasonably conserve visual points of access to waters a viewed from public facilities;
N/A	4.	will conserve actual points of public access to waters;
N/A	5.	will reasonably conserve natural beauty;
N/A	6.	will reasonably avoid problems associated with flood plain development or use.

For each standard, please indicate by checking that item that it has been addressed by your submission. SECTION D. Certification (to be completed by all applicants)

I/we <u>Dodge Orc</u> Company Two, certify that we are the legal applicants for the conditional use permit requested by this application, that we are the owners of the property covered by this application or have the property owner's consent to the filing of this application and have legal interest in the property and that the information contained in this application and supporting materials is accurate and true.

I/we further certify that I/we have read the standards for granting of Conditional Use Permits contained in the Land Use Ordinance.

Signature of Applicant Date: 10-7-94

Baldwin Planning Board Use

Date Received by BPB: 1300000-94 Received by: Received by:

Public Hearing Date: 270ctober 94

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Conditional Use Permit Application of: Dodge Oil Company Inc.

Permit Denied (date): _____ Explanation ____

Permit Approved (date): <u>2700+94</u> Conditions to permit if any <u>1. Town we vow of annual maintenance records</u> <u>2. Conduct annual Fire dept training a response</u> <u>3. Annual necew of emergency response manuel</u> <u>4. 4" Fine hose a day hydrants to be worked out bitauch burna Dodys</u> <u>5. Burn off The a firtungs awayloby git Give barn built by Doday</u> 0.

Lay K. Wank Signature of Applicant

Planning Board Signatures (three signatures needed)

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PRELIMINARY SITE PLAN REVIEW APPLICATIC FOR THE CONSTRUCTION OF A BULK PROPANE STORAGE AND DISTRIBUTION FACILITY IN BALDWIN, MAINE.

The following appendix to the formal application for preliminary site plan review is respectively submitted to the Planning Board of the Town of Baldwin. The purpose is to provide additional information and explanation regarding the bulk propane storage and distribution facility proposed for construction by Dodge Oil Company of Gorham, Maine.

Summary

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The Dodge Oil Company has proposed to lease from the DANJA Corp. a portion of a 2.2 acre parcel of land owned by this corporation. This property is located in the Town of East Baldwin, Map #1, Lot #71B. Dodge Oil Company proposes to build a propane storage and distribution facility for the purpose of serving its customers throughout their service area. The facility will have access from Route 113 as shown on the preliminary site plan.

The facility will have one 30,000 gallon storage tank. Transfer facilities will include one unloading bulkhead to receive transport deliveries, one loading bulkhead for loading retail delivery trucks. An area adjacent to the storage tank will be utilized for storage of reserve customer propane tanks and equipment.

Access

A 12' wide gravel road will be constructed to accommodate truck traffic.

Security

The front of the property will be fenced with gates along Route 113. The end of the storage tank and the bulkheads, piping, pumps, meter and hoses will be fenced with a 6' chain link fence. A security night light operated by a photo-electric day/night switch will be installed to illuminate the propane tank area.

Electricity

Electric power will come in over head with the exception of the last 50' which will be underground. All electrical wiring supplied in the underground portion will be explosion proof Class I Group D.

Waste Disposal

No waste disposal system will be required.

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Preliminary Site Plan Review Page 2

Fire Suppression

A dry chemical fire extinguisher of adequate size will be installed at the plant site. Discussions on water supply are on-going with the Code Enforcement officer and Fire Chief to determine the capability of the Fire Department and alternatives to supply necessary water for fire suppression if the need should arise.

Addressing Section 3-1

- a. This construction site will be approximately 100' x 100' and is part of a petroleum distribution depot.
- b. There will be a low vehicle impact on the streets and highways. Volume will require 2 or 3 transport deliveries per month, and 1 to 3 retail truck entries and departures per week day.
- c. This type of installation is a very clean facility not contributing to noise, odor, vibration, glare, smoke, litter or any other nuisances.
- d. By referring to the site plan you will see that the installation will be approximately 385 feet from Route 113. It is also situated behind the oil storage facility. It does not appear that it will have any adverse effects on any adjoining property.

Addressing Section 3-2

- a. With wide turning radius of driveways and an unobstructed view of traffic in both directions, traffic will be able to move on to the property and exit the property safely.
- b. Exposure to pedestrians will remain the same. Pedestrian traffic will be prohibited within the confines of the facility.
- c. On checking with Maine Department of Transportation, we have been assured that State Route 113 will handle the traffic and has never been posted.
- d. The soil conditions at this property are such that no problems are anticipated with water run-off.
- e. The design of this facility incorporates safety features that will preclude any major release of product to the atmosphere. There is still the possibility of need for emergency response, but the probability is very low.

In the event of an incident, and water is needed, a mutual aid relay system would probably be the most reliable way to accomplish this. We are willing to work with your fire department to establish a plan and to provide training to enact the plan.

We are also open to other suggestions as to how we may be able to help.

Preliminary Site Plan Review Page 3

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Addressing Section 3-3

This property is relatively flat with well drained sandy soil. Due to the characteristics of propane, soil, water or air contamination will not occur. Set backs from Route 113 and property lines are such that no undue harm should occur to the environment and should not preclude development of adjoining properties.

Our intent in this communication is an attempt to answer the requirements of Article IX, Sections 3-1 through 3-3 of the standards for a conditional use permit.

We will be happy to address any questions that may come up at the Board Meeting.

Prepared by: Nelson Leavitt Associates

Clarence "Tiny" Soucier LP Education, Safety, Technical Services

TO: Members of the Planning Board Town of Baldwin, Maine

SUBJECT: Propane Storage tank proposed to be added to the Dodge Oil petroleum storage on Route 113, East Baldwin.

Dear Members:

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> The Dodge Oil Company of Gorham and East Baldwin, Maine is making an application to your town for the installation of one 30,000 gallon propane storage facility. The facility will be located on property owned by the DanJa Corp. and leased to Dodge Oil Company. Danja Corp. is owned by the family which operates Dodge Oil.

> The location of the proposed tank location is on the property off Route 113 behind the oil storage facility presently under reconstruction by Dodge Oil Company.

The two major considerations of uppermost importance in designing this facility are safety and efficiency of operations.

The proposed facility is designed according to, and in many instances exceeds, State of Maine code. (Maine adopts as its code National Fire Protection Association, Pamphlet #58: "Standards for Storage and Handling of Liquefied Petroleum Products".)

Some of the pertinent aspects of planning this project are outlined following. We realize explanations may be needed for some items and will be happy to provide answers to any questions that may arise.

1. Geographic Location

This site was chosen for both oil and propane storage because it is central to the operating area of Dodge Oil Company and is in the town zone most acceptable for its presence. Access for both transport delivery trucks and retail delivery trucks is over State highway Route 113. This highway is well maintained by the State D.O.T. and has no posted weight limits at any time of the year.

2. State of the Art Safety Control and Protection System

This installation will employ an emergency shutdown system which offers immediate shutoff of the entire liquid transfer system from any one of three locations. Shutoff valves are located in the outlets of the tank and at the outlets of the piping. This system is 100% active at all times and offers automatic thermal, manual and pneumatic shutdown. All product on hand, as well as all product being transferred to or from the storage tank, will be protected by this system. The emergency shut-off system, along with back check valves and excess flow valves, will virtually eliminate any accidental release of product to the atmosphere. The system is constructed with steel pipe. Most connections will be welded. The pump end of the tank and valves will be protected against vandalism or damage by a six foot chain link fence with locking gates. Planning Board Members Page 2 October 5, 1994

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- Vehicle Access to the tank will be from Route 113 via a twelve 3. foot wide gravel driveway on the property. This driveway will be of a drive-through design to avoid the need to back up vehicles, and to enable easy snow removal and access by emergency vehicles if ever necessary.
- Upon completion of the facility, it is our intent to draw together emergency response personnel and employees of Dodge Oil Company for the purpose of Emergency Response Training. The results of this training will be a written and rehearsed Emergency Response Plan to the mutual benefit of Baldwin Fire Department, mutual aid departments and Dodge Oil Co. The enactment of this training will 4. departments and Dodge Oil Co. The enactment of this training will also help the Emergency Personnel from the departments understand better how to handle similar situations which could happen unrelated to the Dodge Oil Facility elsewhere in or nearby Baldwin.

In summary, it is our intent to help you to be better informed about the inherent safety of this installation and help you formulate questions for further enlightenment. We will make every effort to answer any questions you may have, or, if we don't know, we will find the answer for you.

Thank you for taking the time to read this letter. I look forward to meeting each of you at the Board Meeting.

Very truly yours,

NELSON LEAVITT ASSOCIATES

Clarence "Tiny" Soucier LP Education - Safety **Technical Services**

Note: Nelson Leavitt Associates is a firm located in Augusta, Maine which offers training and safety services to the Propane Industry and to Emergency Response Personnel.



Fire Safety Analysis

For

Dodge Oil & Propane

251 Pequawket Trail

East Baldwin, ME

Two 30,000 gallons tank

November 6, 2015

Prepared by: Jody Pratt Ameden Energy Consulting LLC 1849 Latham Road Thetford Center, VT 05075 jameden@gmail.com 802-249-5585

12/10/15

Executive Summary

Jody Pratt Ameden Energy Consulting LLC prepared this Fire Safety Analysis (FSA) with critical input by Fire Chief Jason Brown. The installation consists of two 30,000-gallon aboveground storage tanks. The tanks will be installed at 251 Pequawket Trail in East Baldwin, ME. The tanks will be used for retail bulk delivery.

The storage capacity of this installation is greater than 4,000 gallons, so National Fire Protection Association (NFPA) recommends that a Fire Safety Analysis be performed. The propane industry has a well-developed protocol for performing Fire Safety Analyses for Propane facilities. That format will be used for the FSA. The installation will be designed using the latest version of NFPA 58.

The storage tank will incorporate automatic and redundant product control measures to minimize the probability of a significant release of Propane. There are no nearby population concentrations such as schools or malls. The local fire department has a good response time, and the proper training to manage incidents involving Propane tanks.

This preliminary Fire Safety Analysis was performed in preparation for a facility consisting of two 30,000-gallon propane tanks. It is concluded that the proposed plan is compliant with the State Fire Codes and with NFPA 58.

A Fire Safety Analysis should be repeated when required by state or local regulations or whenever there is a significant change of the assumptions in this analysis.

Certification

I prepared this Fire Safety Analysis. I believe the input data to be accurate and the conclusions to be consistent with NFPA 58 guidance. This installation exceeds the fire safety requirements for this facility.

Jody Ameden

Jody Pratt Ameden Energy Consulting LLC

The Purpose of a Fire Safety Analysis

The purpose of the FSA is to evaluate the safety of the facility and to determine if the facility complies with the present Fire Code. The National fire Protection Association, an International Codes and Standards Organization publishes NFPA – 58. This document sets forth comprehensive recommendations for the design and operation of Propane plants. It covers the storage tanks, the piping, leakage control systems, ignition source control and equipment spacing. NFPA is a non-governmental organization and their documents are not regulations.

The FSA also provides an opportunity to determine if there is a need to any special fire protection feature should be provided beyond the basis requirements of NFPA-58. If the FSA indicates that a serious hazard does not exist, then special fire protection is not required.

The FSA is not to intended to determine whether a facility should, or should not, be installed. That determination is beyond the scope of NFPA-58. Local or state laws, including zoning laws, may also apply to the installation of an LP Gas facility. The FSA may recommend or require fire protection features in addition to state and local requirements.

Elements of an FSA

The basic components of an FSA as stated in NFPA 58 are as follows:

- 1. Determine the effectiveness of product control measures.
- 2. An analysis of local conditions of hazard within the container site.
- 3. Exposure to or from other properties, population density, and congestion within the site.
- 4. The probable effectiveness of plant fire brigades or local fire departments based on adequate water supply, response times, and training.
- 5. Consideration for the adequate application of water by hose stream or other method for effective control of leakage, fire, or other exposures.
- 6. If necessary, a designated time period for review of the fire safety analysis with local emergency response agencies to ensure preplanning and emergency response plans for the installation are current.
- 7. In order to standardize these analyses, the National Propane Gas Association (NPGA) and NFPA have generated standardized forms for collecting the required data from all conceivable types of facilities. Those forms that are relevant to this site were used in this analysis. Those forms which were not relevant to the facility are usually not mentioned.

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Form 4.1 Initial Data on the LP-Gas Facility

Α	В	С
Item #	Information Item	Data
1	Name of the LP-Gas Plant Owner or Operator	Dodge Oil & Propane
2	Contact Name:	Jay Banks
3	Contact Telephone & Fax Numbers	207-839-5536
4	Contact Email Address	jay@dodgeoil.com
5		79 New Portland Road
J	Mailing Address	Gorham, ME 04038

	Facility Storage Capacity							
A	B	C	D					
#	Individual Container Water Capacity (wc) (gallons)	Number of containers	Total Water Capacity (wc) of each container size (gallons)					
	500							
	1,000							
	2,000							
	4,000							
	10,000							
1	18,000							
1	30,000	2	60,000					
	60,000							
	Other:							
	Other:							
	Other:							
	Other:		· · · · · · · · · · · · · · · · · · ·					
2	Aggregate Water Capacity		60,000					

Form 4.2 Facility Storage Capacity

Notes: (1) Column $D = Column B \times Column C$.

- (2) Parked bobtails, transports and tank cars should not be considered for aggregate capacity calculations.
- (3) Do not consider containers that are not connected for use.
- (4) For the purpose of this manual, "Aggregate Water Capacity" means any group of single ASME storage containers separated from each other by distances less than those stated in the aboveground containers column of Table 6.3.1.

⊗ Existing Facility; Built to NFPA 58 Edition 2011
a) Name of the Facility (if applicable) <u>Dodge Oil and Propane</u>
b) Type of LP-Gas Facility
c) Facility is located in ⊗ Rural Area, □ Suburban Area, ⊗ City Commercial Zone □ City Industrial Zone
 d) Facility neighbors[§]: □ Agri. fields ⊗ Commercial Bldgs. □ Flammable Liquids Storage (Check all that apply) □ Industrial Activity (metal fabrication, cutting and welding, etc) □ Manufacturing □ Others (explain)
e) Geographic Location of Facility/Address: <u>Pequawket Trail</u>
f) Landmarks, if any:
g) LP-Gas liquid supply by: □ Bobtail ⊗ Truck Transport □ Rail Tank Car (Check all that apply) □ Pipeline
h)LP-Gas Distribution by: (Check all that apply)⊗ Bobtail□Truck Transport□Vapor Piping□Liquid Piping□Dispensing or Vehicle Liquid fueling
i) Number of Vehicle Entrances: \Box One \otimes Two \Box More than two
 j) Type of Access Roads to the Facility (One check per line) Entrance 1 (One check per line) Entrance 2 □ Dirt road ○ City or Town □ Highway □ Paved □ Paved □ Dirt road ○ Gravel road □ Paved
 k) Staff presence □ Not staffed ② Staffed always (24/7) □ Other (Explain)
 Location and distances to Institutional Occupancies surrounding the facility, if any, within 250 ft from the facility boundary in the direction of the assets. N/A
m) Overview plot plan of the facility attached? \otimes Yes \Box No
§ All properties either abutting the LP-Gas facility or within 250 feet of the container or transfer point nearest to

Form 4.3 Additional Information on the LP-Gas Facility

-

All properties either abutting the LP-Gas facility or within 250 feet of the container or transfer point nearest to facility boundaries

Form 5.4

Compliance with Code Requirements for Appurtenances on Containers Having a Water Capacity Greater Than 4,000 Gallons Used in Bulk Plants and Industrial Plants

Α	В	C	E	F	G		
	LP-Gas inlet to		Total Numbe Release Appurte	Control	NFPA 58		
Container		let from	Required by NFPA 58 (applicable edition)	Installed on the container	Section Reference (2011 edition)		
	Vanor	Inlet	2	3	an Mille Alle Transforment -		
1	Vapor	Outlet	2	3			
	Liquid	Inlet	3	3			
		Outlet	3	3			
	Vapor	Inlet	2	3			
2		Outlet	2	3			
-	Liquid	Inlet	3	3			
·····		Outlet	3	3	See Table		
	Vapor	Inlet			5.7.4.2 and		
3	·	Outlet			Table 5.7.4.2		
	Liquid	Inlet					
	Liguid	Outlet					
	Vapor	Inlet					
4		Outlet					
	Liquid	Inlet					
	Liguid	Outlet					

** If the container does not provide an opening for the specific function listed, enter 0 (zero) in columns E and F corresponding to that row.

3

Form 5.5 Requirements for Transfer Lines of 1½-inch Diameter or Larger, Liquid-into-Containers

X	B	С	D	E	F	
Item	Appurtenance (Either No. 1	Appurtenance Provided with the	Installed in the facility?		NFPA 58 Section Reference	
#	or No. 2)**	Feature	Yes	No	(2011 edition)	
		Installed within 20 ft. of lineal pipe from the nearest end of the hose or swivel-type connections.	Х		6.12.2	
		Automatic shutoff through thermal (fire) actuation with melting point of thermal element < 250 °F	Х		6.12.6	
		Temperature sensitive element (fusible link) installed within 5 ft from the nearest end of the hose or swivel type piping connected to liquid transfer line.	Х		6.12.6	
	Emergency Shutoff Valve	Manual shutoff feature provided at ESV installed location.	Х		6.12.10 (1)	
1	(ESV) (Ref § 6.10.1)	Manual shutoff device provided at a remote location, not less than 25 ft., and not more than 100 ft. from the ESV.	Х		6.12.10 (2)	
		An ESV is installed on each leg of a multi leg piping each of which is connected to a hose or a swivel type connection on one side and to a header of size $1\frac{1}{2}$ inch in diameter or larger on the other side.	Х		6.12.5 6.18.2.6 (1)	
		Breakaway stanchion is provided such that in any pull-away break will occur on the hose or swivel- type connection side while retaining intact the valves and piping on the plant side.	Х		6.12.8	
	Back flow Check Valve (BCK)**	Installed downstream of the hose or swivel-type connection	N/A	N/A	6.12.8	
		BCK is designed for this specific application.	Х		6.12.3 and 6.12.4	
2		A BCK is installed on each leg of a multi leg piping each of which is connected to a hose or a swivel type connection on one side and to a header of 1 ¹ / ₂ inch in diameter or larger on the other side.	N/A	N/A	6.12.5	
		Breakaway stanchion is provided such that in any pull-away break will occur on the hose or swivel- type connection side while retaining intact the valves and piping on the plant side.	Х		6.12.8	

** The backflow check valve (BCK) is only permitted when flow is only into the container and shall have a metal-to-metal seat or a primary resilient seat with metal backup, not hinged with a combustible material.

Form 5.6 Requirements for Transfer Lines of 1½-inch Diameter or Larger, Liquid Withdrawal From Containers

~...

Α	В	C	D	E	F	
Item #	Appurtenance	Appurtenance Provided with the Feature	Installed in the facility?		NFPA 58 Section Reference(2011	
			Yes	No	Edition)	
		Installed within 20 ft. of lineal pipe from the nearest end of the hose or swivel-type connections.	X		6.12.2	
		Automatic shutoff through thermal (fire) actuation with melting point of thermal element < 250 °F	X		6.12.6	
	Emergency Shutoff Valve (ESV)	Temperature sensitive element installed within 5 ft from the nearest end of the hose or swivel type piping connected to liquid transfer line.	X		6.12.6	
1		Manual shutoff feature provided at E SV installed location.	X		6.12.10 (1)	
	(Ref § 6.10.1)	Manual shutoff device provided at a remote location, not less than 25 ft., and not more than 100 ft. from the ESV.	X	-	6.12.10 (2)	
		An ESV is installed on each leg of a multi leg piping each of which is connected to a hose or a swivel type connection on one side and to a header of 1 ¹ / ₂ inch in diameter or larger on the other side.	N/A	N/A	6.12.5 6.18.2.6 (1)	
		Breakaway stanchion is provided such that in any pull-away break will occur on the hose or swivel-type connection side while retaining intact the valves and piping on the plant side.	X		6.12.8	

Α	B	С	D	E	F
Item # Appurtenan	Annurtenance	Appurtenance Provided with the Feature	Insta	lled in cility?	NFPA 58 Section Reference
#	Appurtenance	Appurtenance i fovided with the reature	Yes	No	2011
		Installed within 20 ft. of lineal pipe from the nearest end of the hose or swivel-type connections.	X		6.12.2
		Automatic shutoff through thermal (fire) actuation with melting point of thermal element < 250 °F	X		6.12.6
		Temperature sensitive element installed within 5 ft from the nearest end of the hose or swivel type piping connected to liquid transfer line.	X		6.12.6
	Emergency Shutoff Valve (ESV) (Ref § 6.10.1)Manual shutoff feature provided at E SV installed location.Manual shutoff device provided at a remote location, not less than 25 ft., and not more than 100 ft. from the ESV. An ESV is installed on each leg of a multi leg piping each of which is connected to a hose or a swivel type connection on one side and to a header of 1½ inch in diameter or larger on the other side.		X		6.12.10 (1)
1		less than 25 ft., and not more than 100 ft. from the ESV.	X		6.12.10 (2)
		N/A	N/A	6.12.5 6.18.2.6 (1)	
		Breakaway stanchion is provided such that in any pull- away break will occur on the hose or swivel-type connection side while retaining intact the valves and piping on the plant side.	X		6.12.8

Form 5.7 Requirements for Vapor Transfer Lines 1¼-inch Diameter or Larger

Form 5.8 Evaluation of Redundant Fail-Safe Design

A	В		С	D	E	F
t	t Description			Installed in the facility?		NFPA 58 Section
n #			Features	Yes	No	Reference (2011 edition)
	Container Sizes for the appurtenances a provided		Redundant Fail-Safe equipment and Low Emission transfer lines are provided for each container of water capacity 2,001 gal through 30,000 gal	X		6.26.3 and 6.26.4
	LIQUID OR VAP(WITHDRAWAL (or larger)		Internal Valve with integral excess flow valve or excess flow protection	X		6.26.3.1 and 6.26.3.1
			Positive Shutoff Valve installed as close as possible to the Internal Valve	X		6.26.3.4
	LIQUID OR VAPO	OR	Internal Valve with integral excess flow valve or excess flow protection or Back Flow Check valve	X		6.26.3.5
3 INLET			Positive Shutoff Valve installed as close as possible to the Internal Valve or the back flow check valve	X		6.26.3.5
	Railcar Transfer	Flow Into or Out of Railroad tank car	Internal Valve installed in the transfer hose or the swivel-type piping at the tank car end	N/A	N/A	6.18.2.6 (1) and 6.26.4.1
		Flow Only into Internal valve or backflow check valve railroad installed in the transfer hose or the swivel- tank car type piping at the tank car end	N/A	N/A	6.18.2.6 (2) and 6.26.4.1	
	Cargo Tank Transfer		Protection provided in accordance with 6.24.4.1	X		6.26.4.1
	Automatic closure		Actuated by Fire Detection	N/A	N/A	6.26.4.2
	primary valves (IV in an Emergency	& ESV)	Actuated by a hose pull-away due to vehicle motion	N/A	N/A	6.26.4.2
			Remote shutdown station within 15 ft of the point of transfer?	X		6.26.4.3 (A)
h	Manually operated	remote	Another remote shutdown station between 25 ft and 100 ft of the transfer point?	X		6.26.4.3 (B)
Manually operated n shutdown of IV and			Shutdown stations will shut down electrical power supply, if any, to the transfer equipment and primary valves?	X		6.26.4.3
			Signs complying with the requirements of 6.24.4.3 (C)provided?	X		6.26.4.3 (C)

Note: If the facility does not have a rail terminal, write the word NA in both the "Yes" column and the "No" column in item 4 of this Form in the railroad tank car row. Similar option is also available if there is no cargo tank vehicle transfer station.

Form 5.9 Evaluation of Low Emission Transfer Equipment

A	В	С		D	E	F	
	Description	Features		Installed in the facility?		NFPA 58 Section Reference	
#				Yes	No	(2011 Edition)	
1	Transfer into Cylinders or ASME Containers on Vehicles	Delivery Nozzle and Filler Valve- Max. Liquid Release after transfer of 4 cc.	Fixed Maximum Liquid Level Gage not used during transfer operations	N/A	N/A	6.26.5.1 (B)	
2	Stationary ASME Containers. Delivery valve and nozzle combination	During product transfer or post transfer uncoupling of the hose, liquid	does not exceed 4 cc (0.24 in ³) from a hose of nominal size 1 in or smaller	N/A	N/A	6.26.5.1 (A)	
		product volume released to the atmosphere	does not exceed 15 cc (0.91^3 in) from a hose of nominal size larger than 1 in.	N/A	N/A	6.26.5.2 (B)	
;	Transfer into Stationary ASME Containers	an overfilling prevention approved device?		N/A	N/A	6.26.5.2 (F)	
	Maximum filling limit	Do containers of greate have a float gage or oth	or than 2,000 gal (w.c.) her non-venting device?	N/A	N/A	6.26.5.2 (E)	
Ļ	Transfer into Stationary ASME Containers Fixed Maximum Liquid Level gage	Not used during routine transfer operations but used to calibrate other non-venting liquid level gages in the container		N/A	N/A	6.26.5.2 (C,D)	

Form 6.1	
Evaluation of Physical Protection and Other Measures	

Α	B	С	D	E	F
#	Item	Item Features	Installed in the facility?		NFPA 58 Section Reference
			Yes	No	(2011 Edition)
1	Lighting [‡]	Provide lighting For nighttime operations to illuminate storage containers, container being loaded, control valves, and other equipment	X		6.18.5
2	Vehicle impact protection	Protection against vehicular (traffic) impacts on containers, transfer piping and other appurtenances is designed and provided commensurate with the size of vehicles and type of traffic in the facility. (Example protection systems include but not limited to (1) Guard rails, (2) Steel bollards or crash posts, (3) Raised sidewalks.	X		6.6.1.2,6.9. 3.10 and 6.19.3.2
3	Protection against corrosion	Provide protection against corrosion where piping is in contact with supports or corrosion causing substances.	X		6.9.3.11
		Complete only 4A or 4BX	1		1
ſ		Is an industrial type or chain link fence of at least 6 ft high or equivalent protection provided to enclose (all around) container appurtenances, pumping equipment, loading and unloading and container filling facilities?	X		6.18.4.2
4A	Perimeter Fence	Are at least two means of emergency accesses (gates) from the enclosure provided? NOTE: Write "N.A." (not applicable) if (i) The area enclosed is less than 100 ft ² , or (ii) The point of transfer is within 3 ft of the gate, or containers are not filled within the enclosure	X		6.18.4.2 (A)
		Is a clearance of, at least, 3 feet all around to allow emergency access to the required means of egress been provided?	X		6.18.4.2 (B)
	Guard Service	If a guard service is provided, does this service cover the LP-Gas plant and are the guard personnel provided with appropriate LP-Gas related training, per section 4.4 of NFPA 58?	N/A	N/A	6.18.4.3
в	Lock-in-Place devices	Are Lock-in-Place devices provided to prevent unauthorized use or operation of any container appurtenance, system valves, or equipment in lieu of the fence requirements above?	N/A	N/A	6.18.4.2 (C)

Note: Fill only items 1, 2, 3, and 4A or 4B. Indicate with "NA" when not filling the "Yes" or "No" column. ‡ Indicate with "NA" if the facility is not operated at night.

A	B	С	D	E	
*****			Is the Facility compliant?		
#	Ignition Control Requirement	Yes	No	Reference (2011 Edition)	
1	Are combustible materials, weeds and tall grass not closer than 10 ft from each container?	X		6.4.5.2	
2	Is a distance at least 20 ft provided between containers and tanks containing flammable liquids with flash point less than 200 °F (ex., gasoline, diesel)?	X		6.4.5.5	
3	Are electrical equipment and wiring installed per Code requirements?	X		6.22.2	
4	Is open flame equipment located and used according to Code?	N/A	N/A	6.22.3.1	
5	Are ignition control procedures and requirements during liquid transfer operations complied with.?	X		7.2.3.2	
6	Is an approved, portable, dry chemical fire extinguisher of minimum capacity 18 Lbs and having a B:C rating provided in the facility?	X		6.25.4.2	
7	Is an approved, portable, dry chemical fire extinguisher of minimum capacity 18 Lbs and having a B:C rating provided on each truck or trailer used to transport portable containers?	X		9.4.7	
8	Is the prohibition on smoking within the facility premises strictly enforced?	X		7.2.3.2 (B) & 9.4.10	

Form 6.2 Ignition Source Control Assessment

Note: 1) Insert "NA" in both "Yes" and "No" columns of any items that are not applicable.

Form 6.3

Separation Distances from Containers to Buildings, Property Lines that can be Built upon, Inter-container Distances, and Aboveground Flammable or Combustible Storage Tanks

A	В	С	D	E	F	G
	Container Size	Separation Between Property lines, important building or	Minimum	Is the F complia		NFPA 58 Section
#	Range in gal (W.C.)	other property and the <u>nearest</u> container which is	Distance (ft)	Yes	No	Reference (2011 Edition)
1	501	Above Ground	25	N/A	N/A	
1	through	Underground or Mounded	10	N/A	N/A	
	2,000	Between containers	3	N/A	N/A	
	2,001	Above Ground	50	X		
2	through	Underground or Mounded	50	N/A	N/A	1
	30,000	Between containers	5	X		
		Above Ground	75	N/A	N/A	
3		Underground or Mounded	50	N/A	N/A	
	30,001 through 70,000	Between containers	¹ / ₄ sum of diameters of adjacent containers	N/A	N/A	
		Above Ground	100	N/A	N/A	
		Underground or Mounded	50	N/A	N/A	
4	70,001 through 90,000	Between containers	¹ / ₄ sum of diameters of adjacent containers	N/A	N/A	
5	All sizes greater than 125 gal	Separation distance between a LP-Gas container and an above ground storage tank containing flammable or combustible liquids of flash points below 200 °F.	20	N/A	N/A	6.4.5.5 and 6.4.5.6

Note: If any of the container sizes indicated in the above form are not present in the facility, enter "NA" in both Yes and No columns.

11

Form 6.4 Separation Distances between Points of Transfer and other Exposures

Α	В		C	D	E	F	G
#	Type of Exposure within or outside the facility	Check if exposure is	Minimum Distance (ft)	Is the Fa complia		NFPA 58 Section	
	boundary		present		Yes	No	Reference (2011 Edition)
1	Buildings, mobile homes, and modular homes with f			10	N/A	N/A	
2	Buildings with other than	fire resistive walls		25	X		
3	Building wall openings or level of the point of transf			25	N/A	N/A	
4	Line of adjoining property	that can be built upon		25	X		-
5	Outdoor places of public a school yards, athletic field	assembly, including		50	N/A	N/A	
6	Public ways, including public streets, highways, thoroughfares, and sidewalks	From points of transfer in LP-Gas dispensing stations and at vehicle fuel dispensers.		10	N/A	N/A	Section 6.5.3 Table 6.5.3
	sidewaiks	From other points of transfer		25	X		
7	Driveways			5	X		
8	Mainline railroad track cer			25	N/A	N/A	
9	Containers other than thos			10	X		
10		Flammable and Class II combustible liquid dispensers and aboveground and underground		20	X		
11	Flammable and Class II combustible liquid dispensers and the fill connections of LPG containers			10	X		
12 ОТІ	LP-Gas dispensing device Class I liquid dispensing d			10	N/A	N/A	6.24.4.3

NOTE: Place a checkmark in column C against an exposure that is present in or around the facility. Fill columns E or F for only those rows for which there is a checkmark in column C.

Form 6.5 Special Protection Measures – Requirements for Passive Systems

Α	B	B C		D		
#	Special		Is the Facility compliant?		NFPA 58 Section	
	Protection Option	Question	Yes	No	Reference (2011 Edition)	
		Insulation provided on each of the containers?	N/A	N/A	6.25.5.1	
1	Container Insulation	Insulation material complies with the requirements of section 6.23.5.1 of NFPA 58?	N/A	N/A	6.25.5.1 and 6.25.5.2	
2	Mounding of	Each container in the facility is mounded?	N/A	N/A	6.25.5.3	
4	containers	Mounding complies with each requirement under section 6.23.5.3 of NFPA 58.	N/A	N/A	6.25.5.3	
3		Each container in the facility is buried?	N/A	N/A	6.25.5.4	
	Burying of containers	Buried containers comply with each requirement under section 6.6.6.1 of NFPA 58.	N/A	N/A	6.6.6.1 & 6.25.5.4	

Form 6.6 Special Protection Measures – Requirements for Active Systems

	Special		Is the Facility compliant?		NFPA 58 Section	
#	Protection Option	Question	Yes	No	Reference (2011 Edition)	
		Are fixed water spray systems, complying with NFPA 15 ¹ requirements, used for each container in the facility?	N/A	N/A	6.25.6.1	
1	Water spray systems	Do fire responsive devices actuate water spray system automatically?	N/A	N/A	6.25.6.2	
		Can the water spray systems be actuated manually also?	N/A	N/A	6.25.6.2	
		Are the monitor nozzles located and arranged so that the water stream can wet the surfaces of all containers exposed to a fire?	X		6.25.6.3	
2	Monitor nozzle	Can the water stream from a monitor nozzle reach and wet the entire surface of, at least, one half of a length from one end of each of the containers it is designed to protect?	X		6.25.6.3	
Z	systems	Do fixed monitor nozzles comply with NFPA 15 ¹ requirements?	X		6.25.6.3	
		Do fire responsive devices actuate the monitor nozzles?	N/A	N/A	6.25.6.3	
		Can the monitor nozzles can be actuated manually also?	N/A	N/A	6.25.6.3	

1. Refer to Chapter 8 for a discussion on NFPA 15 Standard for Water Spray Fixed Systems for Fire Protection

#	System Protected	ls p protectio provided		Type of physical protection installed
		Yes	No	
1	Storage containers	N/A	N/A	
2	Transfer stations	X		Crash protection
3	Entry way into the plant	X		Fenced

Form 6.7 Protection Against Vehicular Impact

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 Table 7.1

 Distances to Various Types of Propane Hazards Under Different Release Models**

Model #	Details of the Propane Release Model Releases from or due to		Vapor Dispersion Distance to LFL (ft)	Explosion Hazard Distance (ft)	Fire Ball Radiation Distance (ft)
1A	Bobtail hose failure. Release	1" ID x 150 ft hose length	250	110	50
1B	of the entire inventory in the	1" ID x 120 ft hose length	230	103	45
1C	hose, quickly.	1" ID x 75 ft hose length	190	90	40
2	Release of the inventory in a tra 20 gpm for 10 min., due to failed	135	120	25	
3	Release from the container press	No ignitable vapor concentration at ground level			
4	Release from a 1" ID x 150 ft th and reduced flow from a partiall 20 gpm for 10 min.	250	120	50	
5	Leak from a corrosion hole i pressure of 130 psig (correspond size is ¹ / ₄ " ID.	110	120	5	
6	Release of the entire inventory hose.	195	90	40	
7	Transport hose blowdown: Hos release for 3min., from a Transp	-	75	30	<5

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Form 7.1 Types of Occupancies⁽¹⁾ Near or Surrounding the LP-Gas Facility

Type of Occupancies	Model # from Table 7.1	Hazard Distance ⁽²⁾ (feet)	Is an Occupancy located within the hazard distance from the Facility?	
			Yes	No
Assembly Occupancies (Places of worship, Libraries, Theaters and Auditoriums, Food or Drink Bars, Sports Stadiums, Amusement Parks, Transportation Centers, etc. with 50 or more people).				X
Institutional Occupancies (Elderly Persons Home or Nursing Home, Hospitals, Alcohol & Drug Rehabilitation Centers, Prisons)				X
Educational Occupancies (Elementary Schools, Day Care facilities, etc).				X

NOTES: (1) Different types of occupancies are defined in NFPA 5000

(2) Table 7.1 provides a number of scenarios that can result in propane release, and the resulting area exposed for different ignition mechanisms. Determine the scenarios that are applicable to the facility, for the quantities that can be released. Use the hose diameters and length that will be used at the facility if they differ from the ones in Table 7.1 and recalculate the hazard distances using a spreadsheet method that is available at npga.org. Some scenarios may not be applicable to an installation based on other mitigation measures taken, such as a hose management procedure to minimize the possibility of hose failure.

A	В	С	D
Item #	Type of Neighboring Operation	Hazard exist s to the LP-Gas Facility	
		YES	NO
1	Petroleum and other hazardous material storage, wholesale dispensing, etc.	X	
2	Metal cutting, welding, and metal fabrication	N/A	N/A
3	Industrial Manufacturing that can pose external hazards	N/A	N/A
4	Ports, rail yards and trans-shipment terminals handling flammable and explosive materials.	N/A	N/A
5	Other operations that may pose hazards (gasoline and other hazardous material dispensing stations, fertilizer storage, etc).	N/A	N/A

Form 7.2 Exposure to LP-Gas Facility from External Hazards

Petroleum products are stored on site for Dodge Oil use at a safe distance from all other products and meet all code distances for NFPA 58.

Α	В		С
Item #	Data Item		Data Entry
1	Name of the Fire Department (FD).		Baldwin Fire Dept.
2A	Name of the person in the FD assisting with the data acquisition.		Jason Brown
2B	Position of the person in the FD assisting with the data acquisition.		Fire Chief
3 A	Date on which FD data was collected.		July 28, 2015
3B	Name of the person collecting the data.		David Breed
4	Number of firefighters on duty at any time.		Volunteer
5	Average number of firefighters available for response.		8
5A	Number of firefighters qualified to	"Firefighter I" level.	0
6B		"Firefighter II" level.	6
7A	Number of firefighters who would	respond on the first alarm to the facility.	8
7B		respond on the first alarm and who are qualified to the operations level requirements of NFPA 472 or local requirements	4
7C		respond on the first alarm with specific knowledge and training on the properties of LP-Gas and LP-Gas fires.	5
3A	Number of fire apparatus that have the capability to deploy a 125 gpm hose line supplied by onboard water for at least 4 minutes, and	that are in service in the department.	5
В		that would respond on a first alarm.	5

Form 8.1 Data on the Responding Fire Department

Α	В	C	D	E		
Company or Department	Time in Minutes for					
	Alarm Receipt & Handling	Turnout	Travel	Total Time		
Standish FD	3-4	1-2	4-5	11		
Sebago FD	3-4	1-2	5-7	13		
Limington FD	3-4	1-2	10-12	18		
Cornish FD	3-4	5-7	10-12	23		
Hiram FD	3-4	7-10	10	24		
Kezar Falls FD	3-4	3-4	10	18		

Form 8.2 Response Time data for the Fire Departments

Note: Number in Column E = Sum of numbers from Columns B through D.

2	B	С	D	E	F	G	Н
Item #	ASME Container Size (gallons)	Total Surface Area of each Container ¹ (ft ²)	Surface Area of each container to be Cooled (ft ²)	Water flow rate required per container (gpm)	Number of containers of the size indicated	Total Water flow rate requiredr→ (gpm)	Total volum of water required for 10 min (gal)
	500	86	43	10.8			
	1,000	172	86	21.5	-		
	2,000	290	145	36.3			
	4,000	374	187	46.8			
	6,500	570	285	71.3			
	9,200	790	395	98.8			
1	12,000	990	495	123.8			
	18,000	1,160	580	145.0	1		
	30,000	1,610	805	201.3	2	402.6	4026
	45,000	2,366	1,183	295.8			
	60,000	3,090	1,545	386.3			
	90,000	4,600	2,300	575.0	lac and a		11
	Other Size						
2a	Calculated water container protect						
2b	Water flow rate in nearest multiple					500	5000
3	Water for firefigl required	hter protection, if				250	2500
4	Total water flow	rate and volume				750	7500

Form 8.3 Water Flow Rate and Total Water Volume Re d to a Eiro antainare E

Column G = Column F x Column E Column $H = 10 \times Column G$ Line 2a, Column G and Column H are the sum of numbers in each row above line 2 of each column. Line 4, Column G and Column H are the sum of numbers in rows 2 and 3.

Consider only 3 containers for water supply evaluations even if the number of containers in a group is more than 3. -1

ASME container dimensions obtained from www.standby.com/products/storage_tanks.html

The total water requirement for the facility is indicated in item 4, column G (water flow rate) and column H (total water volume or quantity) of Form 8.3. If multiple groups of containers are present in the facility, repeat the calculations in Form 8.3 for each group of containers. The total water requirement for the facility is the largest value for any single group of containers.

Form 8.4 Evaluation of Water Availability in or Near the LP-Gas Facility

Α	B	B C Water from Available?			D	······································
Item #	Water from			Quantitativ	Quantitative information	
1	Public supply or from another piped-in supply through one or more DRY hydrants in or near the facility	X Yes	□ No	Hydrant data	Distance from Facility gate (feet) 3,500 feet	Available water flow rate from all hydrants ⁽¹⁾ (gpm) 1,250 gpm
				Hydrant 1	5,500 1001	1,230 gpm
				Hydrant 2		
				Hydrant 3		
2	A nearby static water source (stream, pond, lake, etc).	X Yes	🗆 No	Time to set up relay <u>10</u> mm.		min.
3	Only through mobile water tanker shuttle.	□ Yes	🗆 No	Time to set Sustainable	up shuttle =	

NOTE: (1) Obtain the flow rate in each hydrant from the local municipal water authority or the entity that supplies water to the hydrant or conduct a test to determine total available flow rate.

 For an exiting facility, communicate this information to local responders for inclusion in their emergency planning.
 For a proposed new facility, refer to Chapter 9

Form 9.1 Analysis Summary on Product Control and Local Conditions of Hazard

Α	В	C	D	E	
Item # CHAPTER Title		Section & Title	Reference FORM #	Number of "NO" checked [§]	
		5.1: Product Control in	5.1 or 5.2 or 5.3	0	
		Containers	or 5.4		
	Product Control Measures in		5.5	0	
1	Containers & Transfer Piping	5.2 Product Control in	5.6	0	
	Containers & Transfer Fiping	Transfer Piping	5.7	0	
			5.8	0	
			5.9	0	
		6.1 Physical Protection Measures	6.1	0	
		6.2 Ignition Source Control	6.2	0	
2 Analysis of Local Conditions of Hazard	Analysis of Local Conditions	6.3.1 Separation distances; Container and outside exposures	6.3	0	
	UI IIazaiu	6.3.2 Separation distances; Transfer points and outside exposures	6.4	0	
		6.4 Special Protection	6.5	0	
		Measures	6.6	0	

§ The number of "No" for Forms from Chapter 5 are the difference between NFPA 58-2004 required number of appurtenances and a lesser number actually installed on the container or the transfer piping.

If in any row of column E ("No") of Form 9.1, the entry number is greater than zero, the proposed LP-Gas facility is not in compliance with the 2011 NFPA 58 Code requirements for product control appurtenances or other safety measures. The design of the proposed facility must be modified to conform to the Code requirements. In addition, the following items should be noted.

[] If there are any "No" checks in Form 6.3, then the separation distance requirements for containers are not satisfied. An option that may be considered is the reduction in separation distance to 10 feet for underground and mounded containers by providing "Redundant and Fail-Safe Product Control Measures." In this case, complete Form 9.4, below to ensure that each requirement of "Redundant and Fail-Safe Product Control Measures" is provided.

[] If there are any "No" checks in Form 6.4, then the separation distance requirements for transfer points are not satisfied. In this case, relocate the transfer points so that the separation distances conform to the code requirements or provide the Low Emission Transfer Equipment. Complete Form 9.5 below and ensure that all requirements for Low Emission Transfer Equipment are fulfilled.

Form 9.2 Analysis Summary on Exposure from and to the LP-Gas Facility

Α	В	C	D	E
Item # CHAPTER Title		Section & Title	Reference FORM #	Number of "YES" checked
Exposure to and from Other Properties	7.1 Exposure to off-site properties and persons from in-plant propane releases	7.1	0	
	7.2 Exposure to propane facility from external events.	7.2	0	

If the entry number in column E ("Yes"), Form 9.2 corresponding to Form 7.1 is greater than zero, consider one or more of the following design alternatives.

¹ Consider moving the container or the transfer point to a different location, if possible and space exists, so that the property or the person is beyond the hazard distance.

2 Provide "Redundant and Fail-safe Product Control Measures". Complete Form 9.4 to ensure compliance.

³ Institute other technical measures such as installing gas and flame detectors (connected to facility shut down systems), sounding alarm outside facility premises, etc.

4 Institute administrative controls such as additional training for personnel, more frequent inspection of hoses and transfer piping, etc.

If the entry number in column E ("Yes"), Form 9.2 corresponding to Form 7.2 is greater than zero, consider one or more of the following design alternatives.

1 Implement procedures to monitor neighboring activity.

2 Install means in the adjacent plant to shut down the LP-Gas plant in case emergency in that plant.

Form 9.3 Analysis Summary on Fire Department Evaluations

A	B	C	D	E	F	
Item #	CHAPTER Title	Section & Title	Reference FORM #	Number "zeros" entered in Column C, Lines 6 through 8 of Form 8.1	Number of "Yes" checked in Column C of Form 8.4	
1	Fire department capability, adequacy	8.1 Data on the Fire Department	8.1	1		
2	of water supply and Emergency Planning	8.2 Fire response water needs and availability	8.4		2	

If the entry number in row 1, Column E of Form 9.3 is greater than zero, consider one or more of the following design alternatives.

1 Discuss with the local Fire Department the needs of the LP-Gas facility and the evaluation results on the capability and training inadequacies of the Department.

2 Consider developing a cadre of personnel within the LP-Gas facility to respond to emergencies.

3 Institute a container special protection system based on active protection approaches or passive approaches. Complete Form 9.6 and Form 9.7 below.

If the entry number in row 2, Column F of Form 9.3 is equal to zero, consider one or more of the following design alternatives.

1 Provide special protection (other than water spray or monitor systems) to containers, satisfying the requirements of section 6.23.5 of NFPA Code, 2011 edition. Complete Form 9.6 to ensure compliance.

2 Consider implementing the various options indicated in Table 9.1.

Form 9.4 Redundant and Fail-Safe Design for Containers

Α	A B		С	D	E	F	
Item #	Description		Features	Proposed for the facility?		NFPA 58 Section	
Ħ				Yes	No	Reference (2011 Edition)	
1	Container Sizes for which the appurtenances are provided		Redundant Fail-Safe equipment and Low Emission transfer lines are provided for <u>each</u> container of water capacity 2,001 gal to 30,000 gal	X		6.26.4 and 6.26.5	
2	Liquid or Vapor Withdrawal (1-1		Internal Valve with integral excess flow valve or excess flow protection	X		6.26.3.1	
	larger)		Positive Shutoff Valve installed as close as possible to the Internal Valve	X		6.26.3.4	
3	Liquid or Vapor Inlet		Internal Valve with integral excess flow valve or excess flow protection or Back Flow Check valve	X		6.26.3.5	
			Positive Shutoff Valve installed as close as possible to the Internal Valve or the back flow check valve	X		6.26.3.5	
1	Railcar Transfer	Flow Into or Out of Railroad tank car	Emergency Shutoff Valve installed in the transfer hose or the swivel- type piping at the tank car end.	N/A	N/A	6.18.2.6 (1) and 6.26.4.1	
•		Flow Only Into railroad tank car	Emergency shutoff valve or backflow check valve installed in the transfer hose or the swivel-type piping at the tank car end.	N/A	N/A	6.18.2.6 (2) and 6.26.4.1	
5	Cargo Tank Tra	nsfer	Protection provided in accordance with 6.24.4.1	X		6.26.4.1	
-	Automatic closu		By fire actuation	X		6.26.4.2	
5 	primary valves (ESV) in an Eme		In the event of a hose pull-away due to vehicle motion	X		6.26.4.2	
			Remote shutdown station within 15 ft of the point of transfer?	X		6.26.4.3 (A)	
			Another remote shutdown station between 25 ft and 100 ft of the transfer point?	X		6.26.4.3 (B)	
7	Manually operated remote shutdown of IV and ESV		Shutdown stations will shut down electrical power supply, if any, to the transfer equipment and primary valves?	Х		6.26.4.3	
			Signs complying with the requirements of 6.24.4.3 (C) (c) provided?	X		6.26.4.3 (C)	

Α	В	С		D	E	F	
Item #	Description	Features		Proposed for the facility?		NFPA 58 Section Reference (2011	
			·····	Yes	No	Edition)	
l	Transfer into Cylinders or ASME Containers on Vehicles	Delivery Nozzle and Filer Valve- Max. Liquid Release after transfer of 4 cc.	Fixed Maximum Liquid Level Gauge not used during transfer operations	N/A	N/A	6.26.5.1 (B)	
			Does not exceed 4 cc (0.24 in^3) from a hose of nominal size 1 in or smaller	N/A	N/A	6.26.5.2 (A)	
Delivery valve and nozzle combination Delivery valve product volume released to the atmosphere	product volume released to the	Does not exceed 15 cc (0.91 ³ in) from a hose of nominal size larger than 1 in.	N/A	N/A	6.26.5.2 (B)		
ţ	Transfer into Stationary ASME Containers	Do containers of less t have an overfilling pre another approved device	vention device or ce?	N/A	N/A	6.26.5.2 (F)	
	Maximum filling Do containers		ers of greater than 2,000 gal (w.c.) t gage or other non-venting		N/A	6.26.5.2 (E)	
Ļ	Transfer into Stationary ASME Containers Fixed Maximum Liquid Level gauge	Not used during routine transfer operations but may be used in calibrating other non- venting liquid level gauges in the container		N/A	N/A	6.26.5.2 (C,D)	

Form 9.5 Evaluation of Low Emission Transfer Equipment

Note: If the facility does not have a particular feature described in the table, write "NA" in both the "Yes" and "No" columns corresponding to its row in item 2.

Form 9.6 Special Protection Measures –Passive Systems

A	В	С)	E
Item Special				sed for cility?	NFPA 58 Section
#	Protection Option	rotection Question Option		No	Reference (2011 Edition)
		Insulation provided on each of the containers?	N/A	N/A	6.25.5.1
1	Container Insulation	Insulation material complies with the requirements of section 6.23.5.1 of NFPA 58?	N/A	N/A	6.25.5.1 and 6.25.5.2
2	Mounding of	Each container in the facility is mounded?	N/A	N/A	6.25.5.3
-	containers	Mounding complies with each requirement under section 6.23.5.3 of NFPA 58.	N/A	N/A	6.25.5.3
3 Burying of containers	Each container in the facility is buried?	N/A	N/A	6.25.5.4	
	Buried containers comply with each requirement under section 16.6.6.1 of NFPA 58.	N/A	N/A	6.6.6.1 & 6.25.5.4	

Form 9.7 Special Protection Measures –Active Systems

Item	Special		1	Facility liant?	NFPA 58 Section Reference
#	Protection Option	Question	Yes	No	
		Are fixed water spray systems, complying with NFPA 15 requirements, used for each container in the facility?	N/A	N/A	6.23.6.1
1	Water spray systems	Do fire responsive devices actuate water spray system automatically?	N/A	N/A	6.23.6.2
		Can the water spray systems be actuated manually also?	N/A	N/A	6.23.6.2
		Are the monitor nozzles located and arranged so that the water stream can wet the surfaces of all containers exposed to a fire?	Х		6.23.6.3
2	2 Monitor nozzle systems	Can the water stream from a monitor nozzle reach and wet the entire surface of, at least, one half of a length from one end of each of the containers it is designed to protect?	Х		6.23.6.3
		Do fixed monitor nozzles comply with NFPA 15 requirements?	Х		6.23.6.3
		Do fire responsive devices actuate the monitor nozzles?	N/A	N/A	6.23.6.3
		Can the monitor nozzles can be actuated manually also?	N/A	N/A	6.23.6.3

26

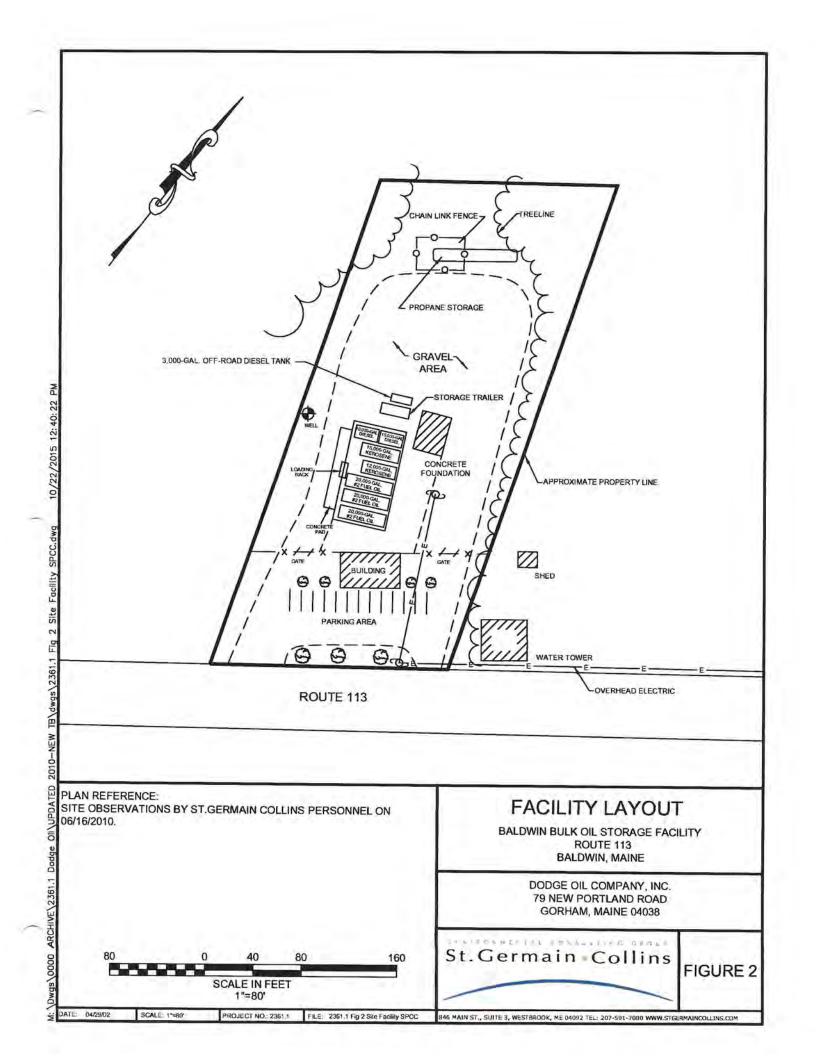
Conclusion

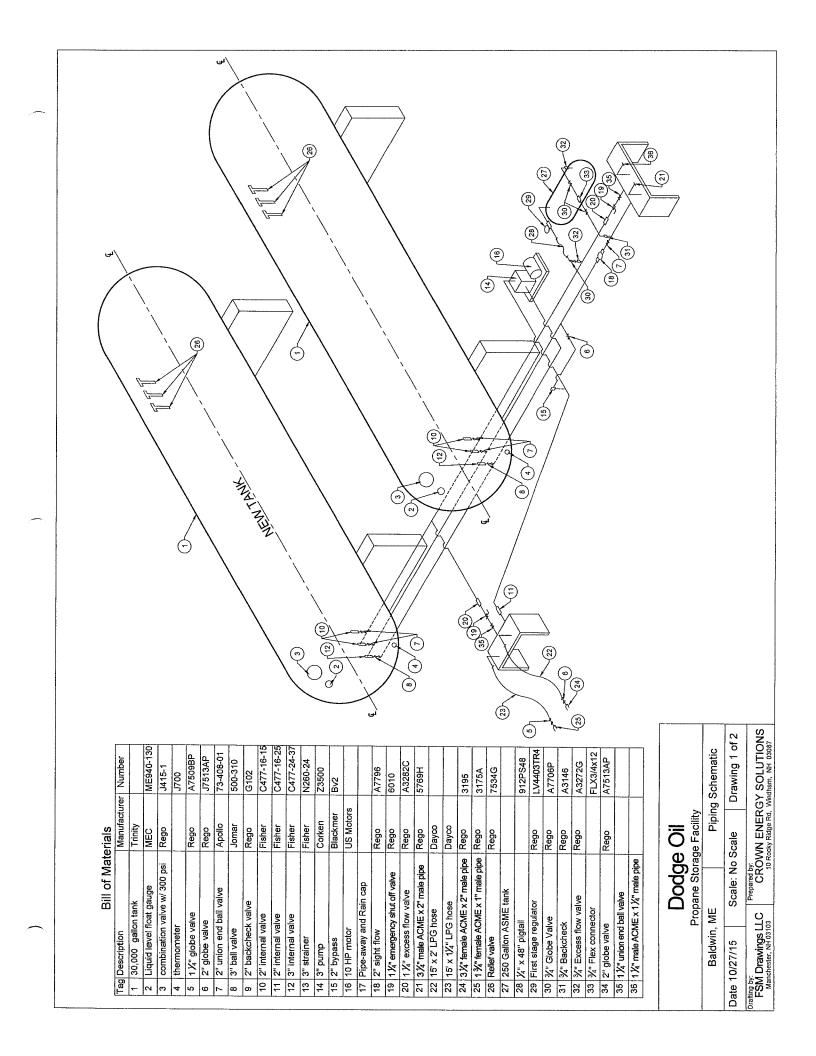
This facility, as proposed, will use the latest version of NFPA 58 for its design and an additional fire monitor will be installed. It will include redundant, automatic and manual control systems, reducing the probability of an accidental propane release.

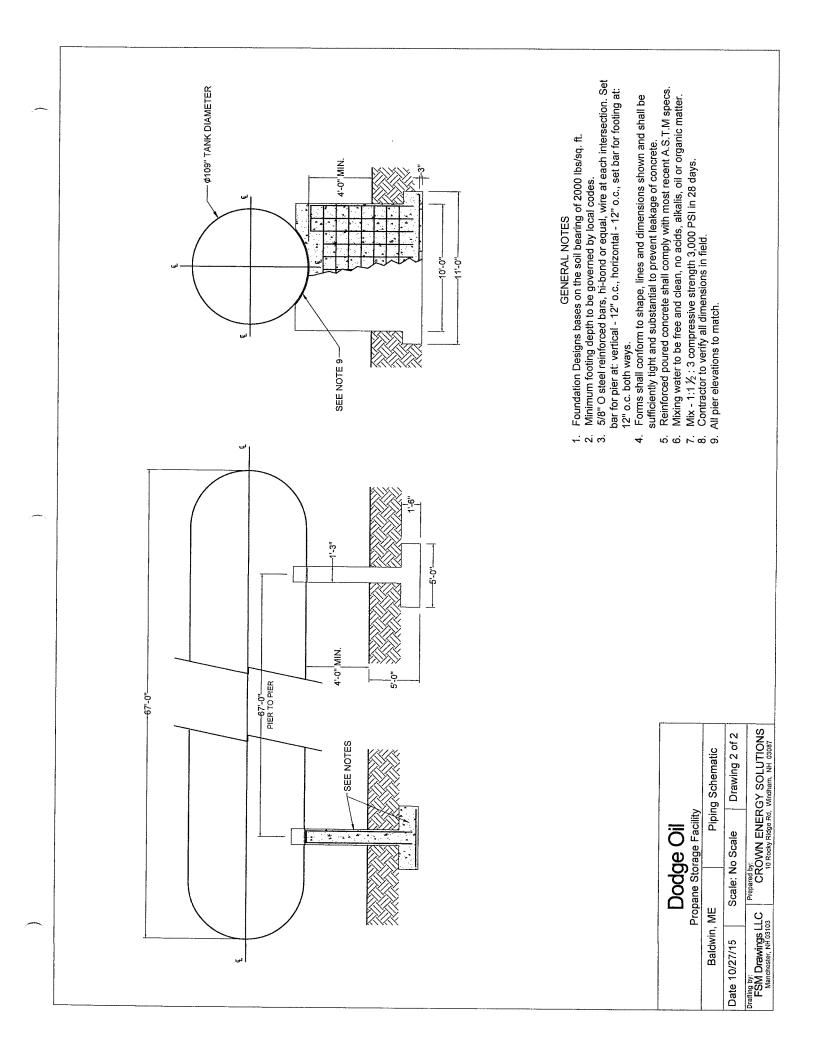
The Baldwin Fire Department is trained in propane and their response time is reasonable. The Department is made up of volunteer members. In addition there are multiple towns able to provide mutual aid with response time of between 11 and 24 minutes. Mutual aid would also provide additional equipment in the form of tankers.

There is a dry hydrant, static water and mobile tankers all available to provide water to this site. Individually they all meet or exceed the required amount for water for a propane facility of this size. These guidelines are outlined in the NFPA Fire Safety Analysis Manual for LP-Gas Storage Facilities.

I conclude that this facility, as proposed, exceeds the requirement of the State of Maine and is compliant with NFPA 58 version 2011.









Baldwin Fire Department

Fire Chief, Jason Brown 534 Pequawket Trail West Baldwin, Maine 04091 207-625-3581



Attn: Jody Ameden

To Whom It May Concern:

The Baldwin Fire Department has been notified of the proposed Dodge Oil expansion project located at 251 Pequawket Trail, East Baldwin, Maine.

We have been in contact with Jody Ameden, Energy Consulting LLC, concerning this matter. The Fire Department has no objections to the Dodge Oil propane expansion as long as it follows all State and NFPA 58 requirements and the proper training and site review upon completion of the expansion provided by dodge oil.

If any questions or concerns arise please contact me via email at <u>ibrownchief200@yahoo.com</u> or by phone at 603-455-5308.

Sincerely,

Jason Brown Town Chief Baldwin Fire Department



Town of Baldwin

534 Pequawket Trail West Baldwin, Maine 04091 Phone: (207) 625-3581 Fax: (207) 625-7780

> Date Application Received: ____ Received by:____ Fee Paid:

APPLICATION FOR CONDITIONAL USE PERMIT (CUP)

The Land Use Ordinance of the Town of Baldwin allows the Planning Board to grant a Conditional Use Permit (CUP) for those uses listed specifically as Conditional Uses in Article 6, District Regulations of the code. Before granting a permit, the Board must find that the standards contained in Article 8, Conditional Uses have been met. It is your obligation to submit the necessary materials to allow the Planning Board to determine if those standards have been met. Three copies of the complete application and supporting materials and the applicable fee shall be submitted to the Code Enforcement Officer.

Section A. Basic Information (to be completed by all applicants)

- 1. Applicant's Legal Name:
- 2. Applicant's Mailing Address: <u>79 New</u>
- 3. Phone number where applicant can be reached during business hours.
- 4. Are you the owner of record of the property for which the Conditional Use Permit is sought?
- 5. To apply for a Cond. Use Permit, you must have legal right, title or interest in the property. Please indicate you interest in the property and attach written evidence of this interest.

yes (provide copy of Title and go to question 8) no (answer question 5, 6, and 7) Conditional Use Permit Application 1

#4

- 6. Property Owner's Name
- 7. Property Owner's Address
- 8. Location of property for Which the permit is sought?

251 Pequaulut Trail

ME 24038

Dedgeoil Co Inc

79 Now Par Hand Rd

9. Indicate the Map and Lot number for the Property from the Town's assessment records Map Lot

10. Indicate Zoning District in which the Property is located (check as many as apply)

> Natural Resource Protection Highlands Rural Village Commercial

11. List the use for which a Conditional Use Permit is being sought. Please refer to Article 6, District Regulations. The proposed use must be specifically listed as conditional use in the District in which it is located

12. Attach the following information to this application as outlined in Article 8, Conditional Uses. For each item, please indicate by checking that item that it has been included with your application.

a. A location map showing the location of the property with respect to Roadways and major natural features. This map should allow the Board to locate the parcel in the field and on the Town's zoning and tax maps.

- b. A written description of the proposed use of the property. This statement shall describe the exact nature of the proposed use.
- c. An accurate, scale drawing of the lot showing the location of any existing or proposed buildings, structures, and natural features, driveways and parking areas.

Section B. Standards for Conditional Use Permit (The full text appears in Article 8.3).

- 1. The Planning Board shall consider impact:
 - ___a. the size of the proposed use compared with surrounding uses;
 - b. the intensity of the proposed use, including amount and type of traffic to be generated, hours of operation, expanse of pavement, and similar measures of intensity of use, compared with surrounding uses;
 - ____c. the potential generation of noise, dust, odor, vibration, glare, smoke, litter and other nuisances;
 - ____d. unusual physical characteristics of the site, including size of the lot, shape of the lot, topography, and soils, which may tend to aggravate adverse impacts upon surrounding properties.
 - ___e. the degree to which landscaping, fencing, and other design elements have been incorporated to mitigate adverse impacts on surrounding properties.
- 2. The Planning Board shall consider facilities:
 - ___a. the ability of traffic to safely move into and out of the site at the proposed location;
 - b. the presence of facilities to assure the safety of pedestrians passing by or through the site;
 - _____c. the capacity of the street network to accommodate the proposed use;
 - _____d. the capacity of the storm drainage system to accommodate the proposed use;
 - ____e. the ability of the Town to provide necessary fire protection services to the site and development.
- 3. The Planning Board shall consider natural characteristics:
 - The natural characteristics of the site, including topography, drainage, and relationship to ground and surface waters and flood plains, shall not be such that the proposed use when placed on the site will cause undue harm to the environment or to neighboring properties.

Section C. Shoreland Standards

Section to be completed only if any portion of the property is located within 250 feet of the normal high water mark of Ingalls Pond, Sand Pond, Southeast Pond, Adams Pond or the Saco River or within 75 feet of any stream. For each standard, attach a written statement demonstrating how the proposed use complies with that standard. For each item, please indicate by checking that item that it has been included with your application. Each standard must be addressed in your submission.

- a. will not result in unreasonable damage to spawning grounds. Fish aquatic life, bird and other wildlife habitat;
- _____b. will reasonably conserve shoreland vegetation;
- _____c. will reasonably conserve visual points of access to waters as viewed from public facilities;
- _____d. will conserve actual points of public access to waters;
- _____e. will reasonably conserve natural beauty;
- _____f. will reasonably avoid problems associated with floodplain development or use.

Section D. Certification (to be completed by all applicants)

I/we ______, certify that I/we are the legal applicants for the Conditional Use Permit requested by this application, that I/we are the owners of the property covered by this application or have the property owner's consent to the filing of this application and have legal interest in the property and that the information contained in this application and supporting material is accurate and true.

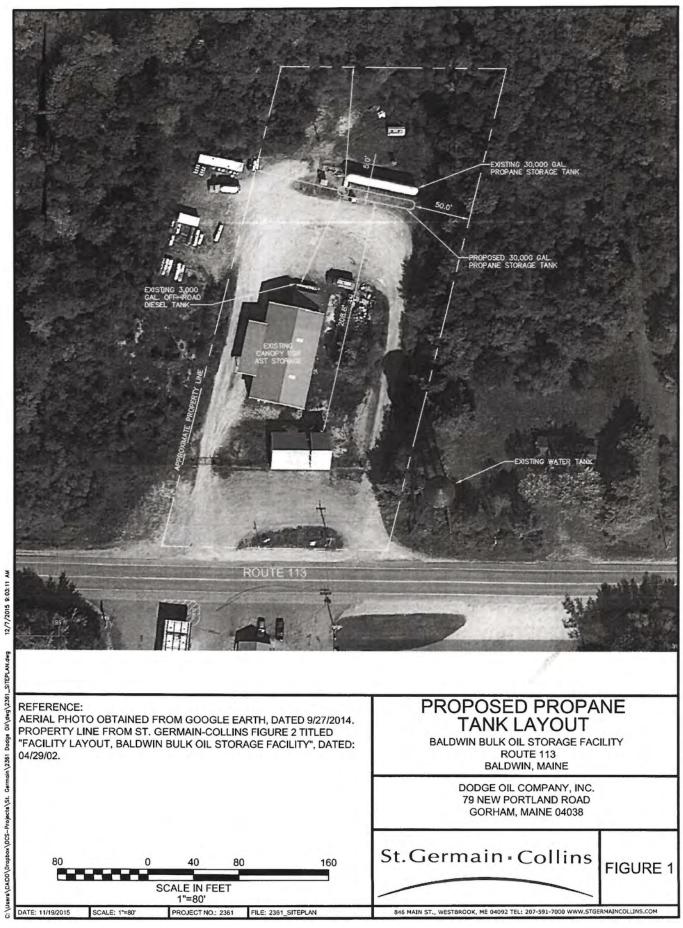
I/we further certify that I/we have read the standards for granting of Conditional Use Permits contained in the Land Use Ordinance.

Signature of Applicant Date

Signature of Applicant

Date

For Planning Board Use Only	
Date Received by Baldwin Planning Board:	
Received by:	
ublic Hearing Date:	
onditional Use Permit Application of:	
ermit Denied (date):	
xplanation of Denial:	
ermit Approved (date):	
onditions to Permit if any,	



12/10/15

Proposed changes to 10.6 Extractive Industry 10 Dec 2015 Norm

10.6.D.1.a strike all and change to:

a. Any operation may, at the sole discretion of a majority of (a) the Code Enforcement Officer and (b) members of the Planning Board persent and qualified to vote on Board matters, be required at any time to submit to inspection by licensed geologist/hydrologist selected by the Town for compliance with all applicable standards. Costs shall be paid in advance by the permittee and failure to pay for the inspection in advance will be cause to revoke or suspend the permit at the discretion of the Planning Board. Henceforth, the permittee shall be inspected under these terms every five years ,at the expense of the permittee to assure continued compliance. Nothing in this section shall be interpreted to prevent the Town from inspecting the operation at its own cost at any time, and apparent violations may be cause for full inspection, at permittee expense. #6

2/10/15

(b) Any extraction operation in continuous grandfathered operation since the origination of the Baldwin Land Use Ordinance may be exempted from periodic geologist/hydrologist inspections provided that their operations have been in substantial compliance with the Performance Standards in this Ordinance. Determination of "substantial compliance" shall be made, as above, by a majority vote of the Code Enforcement Officer and members of the Planning Board present and qualified to vote on Board matter once they have reviewed evidence and provided the permittee an opportunity to explain discrepancies.

10.6.D.2

OR

Add: Loading and removing previously extracted material is NOT sufficient to keep a Conditional Use Permit for Mineral Extraction alive.

10.6.C.22 in Performance Standards :

Any mineral extraction operation within the Saco River Corridor Commission jurisdiction shall obtain and at all times maintain a valid permit for such activities from that Commission as a condition of maintaining a Baldwin permit. Failure to do so will result in the prohibition of all activity within the operation, whether in the Corridor or not.

10.6.A Permit Required

Add: (4) Property owners may, without permit, extract and remove materials between plots

of land in Baldwin such as they own, provided that those materials are for their own use and not sold.