SHAINES & MCEACHERN, PA
Attorneys at Law

COPY

April 1, 2015

Martin Honigberg, Chairman
NH Site Evaluation Committee
NH Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301

Re: SEA-3, Inc. ("SEA-3")
Request for Exemption
NHSEC No. 2015-01

Dear Chairman Honigberg:

Enclosed for filing in connection with SEA-3, Inc.'s Request for Exemption please find three copies of the following items, an electronic version of which is being delivered to Jane Murray at the Department of Environmental Services:

A. City of Portsmouth's Objection to SEA-3, Inc.'s Motion to Intervene and Motion to Dismiss and Memorandum in Support of its Objection to SEA-3, Inc.'s Motion to Dismiss dated March 2, 2015 in City of Portsmouth v. Town of Newington, Rockingham County Superior Court Docket Numbers 218-2014-CV-00654 (Planning Board Appeal) and 218-2014-CV-01287 (Zoning Board of Adjustment Appeal); and

B. Surface Transportation Board's Decision on SEA-3, Inc.'s Petition for Declaratory Order dated March 16, 2015 in SEA-3, Inc. v. City of Portsmouth, Surface Transportation Board Docket Number FD-35853 (Planning Board Appeal).

Respectfully submitted,

Alec L. McEachern

Enclosures
cc: SEA-3, Inc. (without enclosures)
Michael Iacopino, Esq. (without enclosures)
Jane Murray, NH DES (with CD) ✓

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THE STATE OF NEW HAMPSHIRE

ROCKINGHAM, SS SUPERIOR COURT

Docket 218-2014 CV- 654
Docket 218-2014 CV-01287

THE CITY OF PORTSMOUTH

v.

TOWN OF NEWINGTON PLANNING BOARD, ET AL.

CITY OF PORTSMOUTH'S OBJECTION TO SEA-3, INC.'S MOTION TO INTERVENE AND MOTION TO DISMISS

NOW COMES the Petitioner, the City of Portsmouth, and files this Objection to Sea-3 Inc.'s Motion to Intervene and Motion to Dismiss and in support thereof states as follows:

1. The Petitioner, the City of Portsmouth (hereinafter "City"), appealed the Town of Newington Planning Board's decision to approve Sea-3 Inc.'s site plan Application by filing a Petition with this Court on June 17, 2014 which initiated the present case.

2. Because the Town of Newington Planning Board's decision raised issues of whether the Planning Board properly interpreted the Town of Newington's Zoning Ordinance, the City also filed an appeal with the Newington Zoning Board of Adjustment. That appeal and the City's Request for Rehearing was denied and the City filed a Petition with this Court pursuant to RSA 677: 3, RSA 677:4 and RSA 677:15 1-a (a) on November 25, 2014.

3. On December 9, 2014, this Court consolidated both appeals.

4. On January 22, 2015, the Town, the Town of Newington Planning Board and the Newington Zoning Board of Adjustment were served, the Newington Planning Board and Zoning Board of Adjustment have both filed Certified Records and all parties are waiting for the Court to schedule a hearing on the consolidated matter.

5. The issues raised in the City's consolidated Petitions are whether the land use boards in Newington properly interpreted and applied their site review regulations and zoning ordinances in granting Sea-3, Inc.'s site plan Application.

6. The Town of Newington is represented by not one, but three attorneys, John J. Ratigan, Esquire for the Town of Newington Planning Board and Walter L. Mitchell, Esquire and Laura Spector-Morgan, Esquire for the Newington Zoning Board of Adjustment.

7. Adding yet a fourth attorney to address whether the Newington land use boards properly interpreted and applied their site review regulations and zoning ordinances is unnecessary; the City submits it is overkill and the City Objects to Sea-3, Inc.'s Motion to Intervene.

8. The City objects to Sea-3, Inc.'s filing a Motion to Dismiss when it has yet to have been granted Intervenor status. Because Sea-3, Inc. is not a party in the present case, its Motion to Dismiss is unripe and should be dismissed.

9. If the Town of Newington believes the City lacks standing, which the City denies, one, two or all three of the Town of Newington's attorneys are free to raise the issue and there is no need for a non-party to do so.

10. Sea-3, Inc's Motion to Dismiss filed simultaneously with its Motion to Intervene, raises issues relative to federal preemption. This identical issue has been properly raised and briefed by Sea-3, Inc. and the City and is currently pending before the Surface Transportation Board.

11. The Surface Transportation Board has received Requests to Intervene and Substantive Comments as *amicus curiae* filed in support of Sea-3, Inc's Emergency Petition for Declaratory Order from the following; The Boston and Maine Corporation and Springfield Terminal Railway Company (collectively "Pan Am"); Norfolk Southern Railway, Co.; the Propane Gas Association of New England and, CSX Transportation, Inc.

12. If this Court grants Sea-3, Inc.'s Motion to Intervene, given the fact that numerous well funded Intervenors have intervened in the Surface Transportation Board matter, this Court may be opening the door for several corporations and associations to request to Intervene in the underlying matter, such as the Boston and Maine Corporation and Springfield Terminal Railway Company (collectively "Pan Am"), Norfolk Southern Railway, Co, the Propane Gas Association of New England and CSX Transportation, Inc. Additional Requests to Intervene would cause further delay and unnecessarily complicate the City's appeal on local land use boards' interpretation of its site plan regulations and zoning ordinance.

13. RSA 677:5 provides that "any hearing by the superior court upon an appeal under RSA 677:4 shall be given priority on the court calendar."

14. Sea-3, Inc. has requested a separate hearing on its Motion to Dismiss and has also reserved its right to file an Answer thirty days after the Court makes its decision on the Motion to Dismiss. (See footnote 1, page 3 of Sea-3, Inc.'s Motion to Dismiss.)

15. If the Court grants Sea-3, Inc.'s Motion to Intervene and its request for a hearing on the Motion to Dismiss, it will be unable to schedule the City's appeal as a priority, which it must do by statute. The scheduling of the City's appeal will be further delayed if this Court allows Sea-3, Inc. leave to file an answer 30 days after the Court renders a decision on the Motion to Dismiss, and similar requests and delays would ensue if the corporations and associations referenced above file for Intervenor status.

16. The City objects to Sea-3, Inc.'s Motion to Dismiss and denies that this Court lacks subject matter jurisdiction and further denies that the City lacks standing for the reasons set forth in both its consolidated Petitions, its Memorandum in Support of the City of Portsmouth's Objection to Sea-3, Inc.'s Motion to Dismiss attached and incorporated herewith and the certified record of the

Planning Board and Zoning Board of Adjustment.

17. IN THE ALTERNATIVE, if this Court feels it is best to conserve its limited resources (not to mention the City's) by staying all matters in the underlying case pending the decision of the Surface Transportation Board on the federal preemption issue, the City will not object.

WHEREFORE, the City respectfully requests that this Court:

A. Deny Sea-3 Inc.'s Motion to Intervene;

B. Deny Sea-3 Inc.'s Motion to Dismiss;

C. In the alternative, stay all matters in the underlying case until the Surface Transportation Board renders its decision; and

D. For such other and further relief as justice may require.

Respectfully submitted,

By the City of Portsmouth

Dated: 3/2/15

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CERTIFICATE OF SERVICE

I, the undersigned, Jane M. Ferrini, Attorney for the Appellants, the City of Portsmouth, hereby certify that on this 2nd day of March, 2015, a true and correct copy of the foregoing Objection was sent by first class mail to the following counsel of record:

John Ratigan, Esquire
Attorney for the Newington Planning Board
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Jane M. Ferrini

THE STATE OF NEW HAMPSHIRE

ROCKINGHAM, SS SUPERIOR COURT

Docket 218-2014 CV- 654
Docket 218-2014 CV-01287

THE CITY OF PORTSMOUTH

v.

TOWN OF NEWINGTON PLANNING BOARD, ET AL.

CITY OF PORTSMOUTH'S MEMORANDUM IN SUPPORT OF ITS OBJECTION TO SEA-3, INC.'S MOTION TO DISMISS

NOW COMES the Petitioner, the City of Portsmouth, ("City") and files this Memorandum in Support of its Objection to Sea-3 Inc.'s ("Sea-3") Motion to Dismiss and in support thereof states as follows:

INTRODUCTION

The Court should deny Sea-3, Inc.'s Motion to Dismiss because it is not a party to the underlying matter because its Motion to Intervene has not been granted by the Court. As such, this matter is not ripe and should be dismissed. If the Court grants Sea-3, Inc.'s Motion to Intervene, the City more fully sets forth its Objection to Sea-3, Inc.'s Motion to Dismiss below.

SUMMARY OF MATERIAL FACTS AND PROCEDURAL HISTORY

The following facts are taken from the City's consolidated Petitions for appeal as well as the Town of Newington Planning Board's Certified Record, the Town of Newington's Zoning Board of Adjustment's Certified Record and other documents submitted by the City in response to the defenses raised in Sea-3's Motion to Dismiss. See Atwater v. Town of Plainfield, 160 N.H. 503, 507 (2010).

This case involves rail service to two parcels of property owned by Sea-3 at its facility located in Newington, New Hampshire. Sea -3 receives, stores, chills and distributes Liquefied

Propane Gas (LPG) by rail, truck and ship domestically and abroad. Sea-3's facility is served by the common carrier for the rail line, Boston and Maine Corporation/Springfield Terminal Railway Company d/b/a Pan Am ("Pan Am"). The rail line servicing the site travels through four New Hampshire towns, Newfields, Stratham, Greenland and Portsmouth, before it bisects the two parcels of property owned by Sea-3, Inc. in Newington, New Hampshire. Sea-3 applied to the Newington Planning Board for site plan review to expand its facility to accommodate a substantial increase in volume of LPG that will be received, stored, chilled and distributed from the site ("Application").

The City and the three other New Hampshire towns along the distribution route of the rail line received notice of Sea-3's Application because the expansion of the site was determined by the Town of Newington to be a "development of regional impact". The criteria to determine whether a project is a "development of regional impact" is whether the project will impact neighboring communities for various reasons, including, but not limited to, the project's proximity to another community's border, the project's effect on the transportation network and its effect on anticipated emissions such as light, noise, smoke, odor or particles or proximity to aquifers or surface water that transcends municipal borders. RSA 36: 54-58. Land use boards must evaluate all projects to determine if they are a "development of regional impact" and give those affected communities notice in order to provide them with the opportunity to comment on the project.

The City received notice from the Town of Newington and actively participated in the public hearing process for this "development of regional impact". During the public hearing process, both the City of Portsmouth and the Newington Planning Board initially recommended that a rail safety report be conducted prior to approval of the site plan. The Planning Board's recommendation for information about rail safety and its consideration

regarding requiring rail safety reports prior to approval of the site plan is well documented in the record. A few of these references are set forth below:

> Chairman Hebert said the findings of the Federal Railway Association and the NHDOT were crucial. He said he informed Sea-3 and Pam Am Railways they needed to get the FRA to work with the Town.

Planning Board Minutes dated February 10, 2014, Planning Board Certified Record at 168.

> Chairman Hebert reiterated that he was asking Ms. Scarano with Pan Am and Mr. Bogan with Sea-3 to assist the Town in getting the FRA to meet with them. He said the citizens had a right to know the safety condition of the rails and the Town also needed to hear assurances from the FRA before a decision on the site could be made...

Planning Board Minutes dated February 10, 2014, Planning Board Certified Record at 170.

> Chairman Hebert said the Board could not deny Pan Am's operations, but they could say they needed more safety information from the FRA before they approved Sea-3's proposal for expansion.

Planning Board Minutes dated February 10, 2014, Planning Board Certified Record at 171.

> Mr. Richardson read through "Uses Allowed" in the zoning ordinance and said a question of whether the use would create an over intensification of the area might be made in regards to the rails, but they would then be stepping outside their jurisdiction. Mr. Richardson said the Board had been told the rail standards would be upgraded, and they could accept that finding to satisfy the criteria, or request a study to prove it, but there would need to be a determination first.
>
> Town Planner, Tom Morgan said he started out asking the same questions. He said in November 2013 the Board determined if the project would have a regional impact. Mr. Morgan said he thought a study could help determine what that impact might be and to come up with some non-binding recommendations that would assist the communities that would be impacted. Mr. Richardson said he heard statements on the cost of upgrading crossings in surrounding communities, but he wasn't sure how the cost of the upgrades could be attributed to the Sea-3 project. Mr. Morgan said that was all the more reason to have a professional review.

Planning Board Minutes dated May 5, 2014, Planning Board Certified Record at 433.

However, after the Planning Board ultimately relied on an opinion letter from counsel from Pan Am, the Planning Board members refused to consider or require a rail safety report or any other safety or hazard evaluation of the site itself prior to the approval of the project. See

letter from Robert B. Culliford, Senior Vice President and General Counsel for Pan Am dated March 18, 2014 at Planning Board Certified Record at 267-269.

Throughout the public hearing process and during the City's appeals to the Newington local land use boards and the City's present appeal to the Superior Court, the City, outside the public hearing process on the Sea-3 Application, and outside and beyond the scope of the consolidated matters filed in the present case before this Court, has pursued and continues to pursue independent inquiries regarding rail safety, including but not limited to: reaching out to its Congressional and Senate delegations to request rail safety records (Sea-3's Motion to Dismiss, Sea-3's Exhibit B); investigating the development of "quiet zones" in the City (Agenda of City Council dated July 14, 2014, attached and incorporated as City's Exhibit A); having Pan Am appear at City Council meeting to answer questions about rail safety (Agenda of City Council dated July 14, 2014 attached hereto as Exhibit A); attendance at legislative hearings on HB 1376, a bill to establish a committee to study the safe delivery of oil and gas throughout the State; and meeting with the Governor to request her consideration of issuing an executive order on rail safety state-wide. The Meeting with the Governor was scheduled in direct response to two letters from the Mayor's letter to the Governor (Sea-3, Inc.'s Motion to Dismiss, Sea-3's Exhibit C) and letter to the Governor from Mayor Lister dated September 10, 2015 attached and incorporated hereto as City's Exhibit B.

None of these activities are subject to the jurisdiction of the Superior Court or are in any way unlawful or unreasonable. The City not only has the right to pursue this information regarding rail safety from any and all available resources but has a duty and obligation to its citizens to inquire about rail safety in order to protect their health, safety and welfare. None of these inquiries relate to the City's appeal, moreover, these independent inquiries are not intended to impede or interfere with railway operations or the Sea-3 site; rather, these inquiries

are efforts to assess the consequences of increased rail traffic due to the proposed substantial intensification of the use of the Sea 3 facility – in the face of Sea 3's, the Newington Planning Board's, and Pan Am's apparent unwillingness to provide any such information.

The Newington Planning Board granted Sea-3's Application and the City appealed this decision first to the Planning Board and then to the Town of Newington Zoning Board of Adjustment and finally to the Rockingham County Superior Court on the grounds that the Town of Newington failed to abide by its own zoning ordinance and site plan review regulations, including but not limited to failing to require or review a safety/hazard study of the **site** before approving the Application.

Sea-3 alleges that these consolidated appeals – that is, the totality of the allegations and arguments made in the two appeals – are subject to the jurisdiction of the Surface Transportation Board, and thus the Superior Court does not have subject matter jurisdiction over the matter due to federal preemption. See 49 U.S.C. § 10501 (b). Sea-3 alleges that the City is attempting to use state and local law to deny Sea-3 access to common carrier rail service, and as such, the appeals themselves and the issues raised in them, are preempted by the Interstate Commerce Commission Termination Act ("ICCTA").

However, Sea-3 has misconstrued and mischaracterized the City's appeal as a request for a safety/hazard study of the rails when in fact the City's request is for a safety/hazard study of the site. The City denies that the Superior Court lacks jurisdiction over this matter and further denies that it lacks standing to bring its appeal as more fully set forth below.

ARGUMENT

Sea-3's Misapprehends and Misinterprets City's Appeal and Request for Safety/Hazard Study

Sea-3 misinterprets and misconstrues the City's appeals, and does so perhaps deliberately. The City, in its Superior Court appeal, is not attempting to deprive Sea-3 of its

federal right to receive common carrier rail service over the rail line. There is no conflict between the City's request for a safety/hazard study of the **site** and Sea-3 use of Pan Am railway for common carrier rail service under the ICCTA. The City is not using local site plan review regulations or zoning ordinance provisions to regulate the interstate freight rail network in any way. The City is simply asking Newington to comply with its site review regulations and zoning ordinances as they apply to the site itself, not the rails. See Petition of The City of Portsmouth v. Newington Planning Board, Rockingham County Superior Court, Docket No. 218-2014-CV- 00654, and The City of Portsmouth v. Newington Zoning Board, Rockingham County Superior Court Docket 218-2014-CV-01287.

The City's appeals are not an attempt to limit construction of railroad facilities, Sea-3's facilities or an attempt to limit Pan Am or Sea-3's ability to conduct any economic activities. The City alleges that the Planning Board did not comply with its site review regulations and zoning ordinance. The purpose of the City's appeal is to compel Newington's compliance with its own land use regulations. The Newington zoning ordinance and site plan review regulations require the local land use board to assess whether a project promotes the health, safety and welfare of its residents. In order to carry out that mandate, the City argues, a safety/hazard study of the **site, not the rails**, is required for review by the Planning Board prior to the approval of the Application. Further, the City submits that this study is subject to review and comment by the City in order to assess whether the project promotes the health safety and welfare of the residents of Newington and those other affected communities.

Sea-3's allegation that the City's appeal is a request for a rail safety study is not supported by the record. The following paragraphs define the safety/hazard study in the City's appeal to the Superior Court:

> 50. The City, as an abutter, through its Mayor, Assistant Mayor, City Councilors. City Manager, City Staff and citizens, as evidenced in the record, repeatedly and

vociferously **requested that the Planning Board require a safety study/hazard assessment of the site** and of this particular expansion and use intensification prior to approval of the site plan... (Emphasis added)

64. The Planning Board's refusal to conduct, or direct the applicant to conduct or pay for a proper, meaningful, professional and up to date safety, health, welfare and environmental assessment of the potential impacts of the proposed expansion and intensification of the use of the property was unreasonable and unlawful. The Planning Board's failure to require a proper safety, health, welfare and environmental impact assessment was a gross and unreasonably abuse of its discretion. Under the circumstances, **the Planning Board was required to evaluate the site**, and given the nature of the use of land requested, the increased distribution, storing and chilling of LPG, a hazardous material, it should have required and reviewed a safety plan/hazard assessment before approving the site plan.(Emphasis added)

See City's Appeal of the Planning Board Decision at pages 8 and 10.

Again, the reference to the safety/hazard study was clearly for the **site, not the rails,** and this definition was referenced throughout the City's consolidated appeals to the Superior Court as set forth below:

27. **However, in addition to rail safety**, the City, through those participants mentioned above, repeatedly and vociferously requested that the Planning Board require a comprehensive safety and/or security review of the full scope of Sea-3 proposal, including but not limited to a hazard identification and vulnerability assessment, an environmental risk assessment and an analysis of emergency response for the impacted communities, physical security assessments and incident /hazards response analysis. ("safety/hazard assessment").

71. The City, through its Mayor, Assistant Mayor, City Councilors. City Manager, City Staff and citizens, as evidenced in the record, repeatedly and vociferously requested that the Planning Board require a **safety study/hazard assessment of the site** prior to approval of the site plan.

See City's Appeal to the Planning Board, Planning Board Certified Record at 557 and 563.

Residents of the City spoke out during the public hearing process to question the safety of the site and request further investigation. Attorney Christopher Cole represented several citizens at the public hearing process and stated their concern about the safety of the site:

neither he nor his clients were trying to regulate the rails, **but they were trying to help the Town regulate this site** because it had important safety implications. He asked to look at site-specific questions and didn't think Federal law would agree that was the

> limit of the Planning Board's power. He said they also wanted to ensure the site could handle the ingress and egress of traffic with propane…

See Planning Board Minutes dated March 10, 2014, Planning Board Certified Record at 238.

> Mr. Richard Langan asked if an environmental study needed to be done. Mr. Joe Calderola said he hadn't heard much about ground water recharge on the site plan.

See Planning Board Minutes February 10. 2014, Planning Board Certified Record at 170.

Sea-3's claim that the City's only concern is with the rails is inaccurate. The City is concerned with the site's safety and has every right to be so and to bring its present appeals.

The City's request for a safety/hazard study is not pre-clearance requirement

The Interstate Commerce Act ('the Act'), as revised by the ICC Termination Act of 1995, Pub. L. No. 104-88, 109 Stat. 803 (ICCTA) provides that the Surface Transportation Board has exclusive jurisdiction over railroad matters and Section 10501 (b) provides that 'the remedies provided under [49 U.S.C. §§ 10101-11908] with respect to regulation of rail transportation are exclusive and preempt the remedies provided under Federal or State law.' Section 10501 (b)'s purpose is to prevent a "patchwork of local regulation from unreasonably interfering with interstate commerce." Boston and Maine Corporation and Springfield Terminal Railroad Company- Petition for Declar. Order, Finance Docket No. 35749 at 3 (S.T.B. July 9, 2013). Interference with interstate commerce can be direct or indirect.

Sea-3 is claiming, in the first instance, (and parenthetically, incorrectly) that the safety/hazard study is an impermissible study of the rails which is preempt by the Act and under the exclusive jurisdiction of the Surface Transportation Board. Sea-3 is also claiming that any safety study requested by the City is an unauthorized preclearance requirement and is expressly preempted by the Interstate Commerce Act. By way of explanation, the Surface Transportation Board has found preclearance requirement could take the form of either a

permitting requirement or a preclearance requirement like the issuance of an environmental permit, building permit or zoning ordinance. Green Mtn. R. R. Corp. V. Vermont, 404 F.3d 638, 642-643; CSX Transportation, Inc.- Petition for Declar. Order, Finance Docket No. 34662 at 3 (S.T.B. May 3, 2005)

However, this Court should note that although Sea-3 is alleging that the City's request for a safety/hazard study of the site is either an impermissible attempt at indirectly limiting Interstate rail commerce and/or an impermissible preclearance requirement under the ICCTA, it makes no such claim against the Town of Newington Planning Board. The Town of Newington, through the conditions imposed by the Planning Board, has required Sea-3 to update its "safety studies" from its 1996. Paragraph 5 of the Planning Board's decision states as follows:

> Several safety plans were adopted in conjunction with the original SEA-3 site plan approval. They shall be reviewed by SEA-3, updated and submitted to the appropriate public officials (including the Newington Fire Chief) for review and approval prior to the commercial operation of the improvements authorized by this approval.

See Decision of Planning Board dated May 21, 2014, Planning Board Certified Record at 548 and May 19, 2014 Minutes of Planning Board, Planning Board Certified Record at 542.

The City's argument is that these site specific safety studies should have been updated before the Application was granted, allowing for public review and comment. Although the Planning Board's condition of updating the original studies are to be reviewed and approved prior to the commercial operation of Sea-3's site expansion, Sea-3 does not allege that this conditions impose by the Planning Board is an impermissible preclearance requirement intended to deny or delay Sea-3 access to common carrier rail service, which would be prohibited by the ICCTA and subject to the jurisdiction of the Surface Transportation Board. Sea-3 not only continues to mischaracterize the nature and scope of the City's request, but it

claims that only the City's request for a safety/hazard study, not the Planning Board's request, violates the ICCTA.

By way of background, Sea-3 last expansion was in 1996. In 1996, the Newington Planning Board reviewed over 200 pages of safety/hazard reports. These reports included the following: 1. *SEA-3, Inc. Newington, New Hampshire. LPG Import Terminal, Hazard Modeling Study for Additional Tankage,* May, 1996, by Fluor Daniel, Inc.; 2. *Sea-3 Process Safety Management Manual*, July 15, 1996; 3. *Sea-3 Inc. Newington Marine Terminal, Initial Process Hazard Analysis, Final Report,* 6 October, 1995 by LGA Engineering; 4.*Sea-3, Inc. Newington Marine Terminal Fire Safety Analysis, Draft Report*, July 1996; 5. *Mooring Policy and Procedure Manual, Newington Propane (LPG) Terminal*, May 1993; 6. *Marine Safety Office, Portland Maine, Liquefied Petroleum Gas (LPG) Contingency Plan.*

The project was deemed a "development of regional impact" and the City and the Rockingham Planning Commission requested that the Newington Planning Board hire an independent expert. The Town of Newington, under its then site plan regulations, required Sea-3 to pay for two consultants to review and comment on Sea-3's "safety/hazard report". **None of these reports were a rail safety study but were studies focused on the evaluation of the safety and potential hazards of the expansion of Sea-3's facility at the site.** The two consultants' evaluations are attached and incorporated as City's Exhibits C through I. They specifically reference the Hazard Modeling Study and an excerpt of that report is also attached and incorporated hereto as City's Exhibit J.

The City is appealing the Planning Board's decision, in part, because no such similar safety study of the site was done prior to approval of the site plan Application. The Town is requiring an "update" of Sea-3's original safety plans, making no reference to which safety plan is to be updated, and this post-approval will be outside public comment and process. The

issues raised in the City's appeal whether Newington's local land use boards interpreted and applied their site plan regulations and zoning ordinance properly; these issues are properly before this Court because they do not address or afffect Interstate rail commerce.

Legal Analysis

Cities and towns are able to exercise their police power over certain sites if the State and local regulation pass a two-part test: 1) it is not unreasonably burdensome, and (2) it does not discriminate against railroads" New York Susquehanna and Western Railway Corporation v. Jackson, 500 F3d 238 (3rd Cir. 2007). "[T]he touchstone is whether the state regulation imposes an unreasonably burden on railroading." Id. at 253. In certain cases, the exercise of local police power will not be allowed if the provisions are typically allowable but are subject to exclusive discretion or may cause unlimited delay to rail operations.

It bears emphasis that no requests by the City and no allegation in either appeal burdens a railway or a railway operation. The City's appeal is not about the City issuing a cease and desist order prohibiting rail traffic to warehouse because zoning prohibits use of land as freight yard. See Boston and Maine Corporation and Springfield Terminal Railroad Company, Finance Docket No. 35749 (S.T.B. July 19, 2013). The City's appeal does not require or seek a pre-construction preclearance environment permit. Green Mountain Railroad Corporation v. State of Vermont, 404 F.3d 638 (2nd Cir. 2005). The City's appeal does not involve an ordinance provision that requires a discretionary permit limiting the number of trucks leaving Sea-3's facility or passing through the City. Norfolk Southern Railway Company v. City of Alexandria, 608 F.3d 150 (4th Cir. 2010).

Sea-3's assertion that this Court lacks subject matter jurisdiction and jurisdiction and its claim that this matter is properly before the Surface Transportation Board is similar to the misplaced argument of Hi-Tech Transportation, LLC in the federal district court in New

Jersey. In Hi-Tech Transportation, LLC v. State of New Jersey Department of Environmental Protection, 382 F.3d 295 (3rd Cir. 2004), the State of New Jersey brought an administrative enforcement action against Hi-Tech, which operated a solid waste disposal facility there. Hi-Tech claimed that certain permit and licensing requirements imposed by the State's regulatory scheme were preempted by the ICCTA, because its business involved transportation by railroad. Hi-Tech claimed that regulation of its business was, therefore, exclusively within the STB's jurisdiction. Both the federal district court and the United States Court of Appeals for the Third Circuit disagreed.

As Sea-3 does here, Hi-Tech sought a declaration that New Jersey administrative rules and regulations were preempted and within the exclusive jurisdiction of the STB because its solid waste facility involved railway activity carried out under a license of trackage rights. Conceding that it was not certified as a rail carrier, Hi-Tech asserted that the STB still had exclusive jurisdiction because "its facility falls under the ICCTA's definitions of 'transportation' and 'railroad.'" 382 F.3d at 306. Because it fell under both definitions, Hi-Tech argued that "its facility is subject to the STB's exclusive jurisdiction and, therefore, New Jersey's [statute and administrative scheme] are preempted as applied to it." The Third Circuit noted as follows:

> Even if we assume *arguendo* that Hi Tech's facility falls within the statutory definition of "transportation" and/or "railroad," the facility still satisfies only a part of the equation. The STB has exclusive jurisdiction over *"transportation* by rail carrier." 49 U.S.C. §10501(a), (b) (emphasis added). However, the most cursory analysis of Hi Tech's operations reveals that its facility does not involve "transportation by rail carrier." The most it involves is transportation *"to* rail carrier." Trucks bring C & D debris from construction sites to Hi Tech's facility where the debris is dumped into Hi Tech's hoppers. Hi Tech then "transloads," the C & D debris from its hoppers into rail cars owned and operated by CPR, the railroad. It is CPR that then *transports* the C & D debris "by rail" to out of state disposal facilities.

382 F.3d at 308.

Sea-3 loads LPG on to rail cars on rail lines owned by Pan Am. Pan Am then transports the LPG by rail. Like Hi Tech, Sea-3 does not involve transportation by rail carrier, but transportation to rail carrier and therefore, this matter is not subject to the Surface Transportation Board's exclusive jurisdiction.

The City's appeals ask the Town of Newington, in a fundamental sense, to carry out the studies and safety evaluations of the Sea-3 proposal that it directed be done in 1996, in connection with a smaller and less substantial expansion of its operations. The City's appeals seeks the ability to review and comment on safety/hazard assessment, similar to one that was required and reviewed by the Newington Planning Board when Sea-3 expanded its facilities in 1996. Interstate commerce and railway operations are not burdened or delayed by the City's appeal, even if successful. Pan Am has voluntarily agreed to upgrade its tracks and is in the process of doing so. Sea-3 is a going concern and is currently conducting its business at its current facility. Mr. Bogan stated at public hearing that he "expected the project to take a year before it would be operational'. See Town of Newington, Planning Board Meeting Minutes dated February 10, 2014, Planning Board Certified Record at 170. Any new safety/hazard study would not subject Sea-3 to an unreasonable delay and is not unreasonably burdensome, nor does it discriminate against railroads.

The City Denies It Lacks Standing

A non-abutter has standing to appeal a decision of a Planning Board if the Court finds, after a review of the facts, that the party has sufficient interest in the outcome. See Weeks Restaurant Corp. v. City of Dover, 119 N.H. 541 (1979). The Weeks Court lists certain factors that must be considered when evaluating whether a non-abutter has standing:

> ...Whether a party has a sufficient interest in the outcome of a planning board or zoning board proceeding to have standing is a factual determination in each case. The trial court may consider factors such as the proximity of

> the plaintiff's property to the site for which approval is sought, the type of change proposed, the immediacy of the injury claimed, and the plaintiff's participation in the administrative hearings.

119 N.H. at 544-45.

The Court in Weeks also opined that the list of factors was **not exhaustive** and that Courts should consider "any other relevant factors bearing on whether the appealing party has a direct, definite interest in the outcome of the proceeding." Weeks at 544-45.

In several recent cases, the Supreme Court has further discussed these factors established by Weeks in evaluating whether a non-abutter has standing to appeal, and has further defined what it means to be "directly affected". Golf Course Investors of New Hampshire v. Town of Jaffrey, 161 N.H. 675 (2011); Hannaford Brothers Co. v. Town of Bedford, 164 N.H. 764 (2013). Participation in administrative hearings before land use boards, although not the only factor, is a major factor the Court will consider in determining whether a so-called non-abutter has a direct, definite interest in the outcome and is a person directly affected. See Golf Course Investments at 684. Some of the factors the Court will consider are proximity, type of change of use, immediate impact in addition to participation in administrative hearings.

Proximity: The City of Portsmouth is a community that abuts Newington. Although it does not own property immediately adjacent to the site itself, the City and Newington share common transportation systems of rivers, roads and rails. In terms of proximity, any catastrophic event at the site would likely require the evacuation of City's residents and the loss of property and damage. Any significant logistical issue relating to bringing materials into the Sea-3 facility by rail would have a substantial effect on the logistics and operations of ordinary traffic and concourse in and for the City of Portsmouth.

Type of Change of Use: The type of change of use requested by Sea-3 is an expansion and intensification of use of not only its property, but the shared transportation systems of river, road and rail through the City due to the increase in volume of LPG being delivered, stored, chilled and distributed from the site. Although the Planning Board is not able to unduly restrict the railroad from conducting operations or unreasonably burden interstate commerce, its decision to allow Sea-3's expansion will cause a material and substantial impact and increased burden on the City by increasing traffic of hazardous material and their associated risks by river, roads and rail throughout the City.

Immediate Impact: The impact of Sea-3's expansion will be immediate because Pan Am has represented that it would be improving the tracks to accommodate a larger volume of LPG transported by rail cars that can travel at higher speeds. The City would be required to improve several rail crossings that were initially estimated cost of $2,400,000.00 million dollars. The City is now aware that part of the costs may be deferred by working with NH DOT, but a percentage of these costs will be borne by the City and its taxpayers. Citizens of Portsmouth will not only be obligated to pay for improved roadways at rail crossings, but will be supplementing Newington's Fire Department, given their limited number of fire fighters and equipment, in the event of an incident at the site. The City taxpayers will pay for this burden but will not receive any of the tax benefit Newington receives from Sea-3. The City also supplies water to Newington at the site and to the Newington Fire Department and the City's water resources would be impacted in the event of an incident at the site. In addition, on information and belief, there will be a potentially substantial diminution in value of certain property in the City, specifically those residential neighborhoods that abut the railway, reducing the City's tax base.

Participation in administrative hearings: As previously stated, the City submitted written testimony, letters and provided thoughtful, well researched and pointed public comment during the seven public hearings. There were more citizens, elected officials and staff from the City than any other stakeholder or representatives of any other towns at most of these hearings.

Standing will not be extended to all persons in the community who feel they are injured by a local administrator's decision (Goldstein v. Town of Bedford, 154 N.H. 393, 395 (2006)); or those who only have a generalized interest in the outcome of a decision of land use board (Nautilus of Exeter v. Town of Exeter, 139 N.H 450, 451-52 (1995)); or those who allege a speculative injury (Joyce v. Town of Weare, 156 N.H. 526 (2007); or to those whose only injury is potential economic loss due to business competition. See also Hannaford at 769.

Towns are not "isolated enclaves, far removed from the concerns of the area in which they are situated. As subdivisions of the State, they do not exist solely to serve their own residents, and their regulations should promote the general welfare, both within and without their boundaries." Britton V. Chester, 133 NH 434, 441 (1991). This is particularly true where, as in this matter, the municipalities are closely connected by economic and resource concerns, and where the municipalities effectively share infrastructure and logistics. Newington is not an isolated enclave. It must promote, and at least give meaningful consideration to, the general welfare of the City. Its failure to do so, and its unwillingness to order or provide for a safety/hazard assessment was a decision that clearly does not promote, but hinders – or at least largely and unreasonably ignores – the general welfare of the City. At the same time, Newington will receive a financial benefit from the tax revenue it receives from Sea-3, Newington is imposing a financial burden on the City to improve roads and to provide services

of its first responders, all while it denies the City its request for a safety/hazard assessment of the project.

Sea-3 also challenges the City's standing to bring suit based on the fact that the City became an abutter when it was given notice by the Town of Newington that the project of was development of regional impact because RSA 36:57 defined abutters "for the limited purpose of notice and providing comment". However, the Court must look at the statutory scheme as a whole, in that RSA 36 is the enabling legislation for the creation of the Regional Planning Commissions, which are "political subdivision of the state" as established in RSA 36:49-a and have only the authority expressly provided for in the statute, providing that "nothing in this subdivision shall be deemed to reduce or limit any of the powers, duties or obligations of planning boards in individual municipalities." RSA 36:47. The statutory scheme of RSA 36 was carefully drafted to create and empower these Commissions without granting them the ability to rest control from local land use boards. The City is not attempting to rest control from local land use boards. It is fighting to receive notice and the ability to provide meaningful comment on a safety study required by site review and zoning ordinance, and notice and comment, as required by the statute, for any "updated" report from Sea-3's original application as conditioned by the Planning Board. See Planning Board Certified Record at 542 and 548.

Because the City of Portsmouth is a "person aggrieved" and "person directly affected" for the aforementioned reasons and it has a direct define interest in the outcome of the Planning Board's decision to grant Sea-3's Application and appeals the decision of the Newington Planning Board because it misapplied and misinterpreted its site review regulation and zoning ordinance and Sea-3's Motion to Dismiss should be denied.

Conclusion and Request for Relief

Sea-3, Inc.'s allegation that the City's sole objective is to block LPG rail traffic from travelling through the City of Portsmouth is a misstatement and misinterpretation of the City's appeal to the Superior Court. The subject of this appeal is the safety of the site. The City does have concerns about rail safety and these concerns are legitimate and proper and are addressed outside the courts and are not subject to the jurisdiction of the Superior Court. Admittedly, Congress granted the Surface Transportation Board broad authority over the rails. However, it was not the intent of Congress to stifle or prevent a municipality's separate and legitimate inquiry regarding the proper interpretation and enforcement of local land use regulations and ordinances. Sea-3 attempts to conflate the City's and its neighbors' interest in understanding the consequences of its actions and its expansion with railway operations in order to use ICCTA preemption to ward off legitimate inquiry and legitimate application of local site plan regulations

The City is not preventing the expansion but is simply trying to ensure that the expansion of the site is safe and complies with local zoning and site plan review regulations to protect the public health, safety and welfare, and therefore, Sea-3's Motion to Dismiss should be denied.

Respectfully submitted,

By the City of Portsmouth

Dated: 3/2/15

Jane M. Ferrini, Staff Attorney
N.H. Bar 6528
1 Junkins Avenue
Portsmouth, NH 03801
(603) 610-7256
jferrini@cityofportsmouth.com

CERTIFICATE OF SERVICE

I, the undersigned, Jane Ferrini, Attorney for the Appellants, the City of Portsmouth, hereby certify that on this 2nd day of March, 2015, a true and correct copy of the foregoing Memorandum was sent by first class mail to the following counsel of record:

John Ratigan, Esquire
Attorney for the Newington Planning Board
225 Water Street
Exeter N.H. 03833

Walter Mitchell, Esquire
Laura Spector-Morgan, Esquire
Attorneys for the Newington Zoning Board of Adjustment
Mitchell Municipal Group, P.A.
25 Beacon St E Suite 2
Laconia, NH 03246

Alec McEachern, Esquire
Attorney for Sea-3, Inc.
Shaines & McEachern, P.A.
282 Corporate Drive, Unit 2
Portsmouth, NH 03801

Christopher Cole, Esquire
Attorney for Intervenors
1000 Elm Street
P.O. Box 3701
Manchester, New Hampshire 03105-3701

Jane M. Ferrini

Exhibit A

CITY COUNCIL MEETING

MUNICIPAL COMPLEX, EILEEN DONDERO FOLEY COUNCIL CHAMBERS, PORTSMOUTH, NH
DATE: MONDAY, JULY 14, 2014 **TIME: 7:00 PM**

AGENDA

- **6:00PM – AN ANTICIPATED "NON-MEETING' WITH COUNSEL RE: NEGOTIATIONS – RSA 91-A:2, I (b-c)**

I. **CALL TO ORDER [7:00PM or thereafter]**
II. **ROLL CALL**
III. **INVOCATION**
IV. **PLEDGE OF ALLEGIANCE**

PRESENTATION

1. Cynthia Scarano, Executive Vice President, Pan Am Railways Re: Sea-3 Terminal
   NHDOT Chief of Design Services – Melodie Esterberg
   NHDOT Rail and Transit Administrator – Michelle "Shelly" Winters
   NHDOT Railroad Inspector – John Robinson
   Peter Britiz, City's Environmental Planner/Sustainability Coordinator

V. **ACCEPTANCE OF MINUTES – APRIL 7, 2014**

VI. **PUBLIC COMMENT SESSION**

VII. **APPROVAL OF GRANTS/DONATIONS**

A. Acceptance of Grant from the Our New Hampshire Heritage – a fund of Northeast Auctions, an advised fund within the New Hampshire Charitable Foundation for Restoration of the Kearsarge Fire Pumper - $15,000.00 ***(Sample motion – move to approve and accept the grant from the Our New Hampshire Heritage – a fund of Northeast Auctions, as advised fund within the New Hampshire Charitable Foundation, as submitted)***

VIII. **CONSIDERATION OF RESOLUTIONS AND ORDINANCES**

A. First reading of Ordinance amending Chapter 10 – Zoning Ordinance, Article 15, Definitions, Section 10.1530 – Terms of General Applicability, are hereby amended by adding the following new term and definition: Building Footprint – The horizontal area of a lot covered by the building, excluding (a) gutters, cornices and eaves projecting not more than 30 inches from a vertical wall, and (b) structures less than 18 inches above ground level such as decks and patios

Exhibit B

CITY OF PORTSMOUTH

Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801
(603) 610-7200
Fax (603) 427-1526

Robert J. Lister
Mayor

September 10, 2014

The Honorable Margaret Hassan
Office of the Governor
State House
107 North Main Street
Concord, NH 03301

Dear Governor Hassan:

This letter follows my June 18, 2014 letter to you requesting a comprehensive state-wide hazard/safety study and risk analysis regarding transportation of LPG throughout the State.

Since drafting that letter, it has come to my attention that you have been contacted by several concerned citizens from the City of Portsmouth who have requested that you issue an Executive Order for the New Hampshire Department of Transportation (NHDOT) to review the safety of the State's rail system. The Governor of Maine recently issued such an Executive Order in response to the tragedy in Lac Megantic, Quebec. See copy of Executive Order and Rail System Safety Report generated from that Executed Order attached hereto.

As you are aware, the citizens of Portsmouth have concerns about rail safety as a result of the anticipated increase in rail traffic due to the expansion of Sea-3's facility in Newington, NH. The City has appealed the Town of Newington's decision to grant Sea-3's site expansion; however, the City may not be successful in its appeals and even if it is, a rail safety study will not be the likely result of successful litigation.

To further complicate matters, the City's appeals to the Newington ZBA and Superior Court have been challenged by Sea-3 in their Emergency Petition for Declaratory Order filed with the Surface Transportation Board. Sea-3 has argued that the Surface Transportation Board has exclusive jurisdiction over this matter and the City's appeals should be dismissed. Pan Am Railway plans to intervene in this matter supporting Sea-3's position by the end of the month.

An Executive Order can do what the pending litigation cannot. The Executive Order would request that all private rail owners in the State provide information regarding their safety practices for transporting hazardous material over the rails throughout the State. The DOT would be able to review Federal Railroad Administration reports and Hazardous Materials Safety Administration reports in order to determine if the State's rail system is adequate to transport these hazardous materials. This analysis is necessary to ensure and protect the public health, safety and welfare of all citizens of the State.

It is my understanding that HB 1376 (RSA 303:1-8) established a Committee to study the safe delivery of oil and gas throughout the State and the Committee Report is due by May, 2015. I would like to meet with you and Senator Martha Fuller Clark to discuss the possibility of you issuing an Executive Order prior to the date of the Committee's Report.

Thank you for your consideration of this request. The City of Portsmouth looks forward to the opportunity to work with the State to address this important public safety issue.

Sincerely,

Robert J. Lister
Mayor

RJL/jmf

cc: Councilor Joseph D. Kenney
Councilor Colin Van Ostern
Councilor Christopher T. Sununu
Councilor Christopher C. Pappas
Councilor Debora B. Pignatelli
Senator Martha Fuller Clark
Senator David Watters
Senator Nancy Stiles
Portsmouth City Council Members
Portsmouth Legislative Delegation
Chris Cole, Esquire
John P. Bohenko, City Manager
Robert P. Sullivan, City Attorney
Jane Ferrini, Staff Attorney

Rail System Safety Report

Prepared for Governor Paul R. LePage
as required by
Executive Order 2013-004

September 30, 2013

MaineDOT

1. Introduction

On July 6th 2013, a runaway and unattended freight train operated by Montreal, Maine and Atlantic (MMA) carrying 72 cars of crude oil derailed and exploded in Lac Megantic, Québec, taking 47 lives and destroying more than 30 buildings in the town. To assure Maine citizens that systems are in place to prevent such a tragedy in Maine, on July 9th Governor LePage issued Executive Order 2013-004, which required the Maine Department of Transportation (MaineDOT) to review the safety of the State's rail system and report back to the Governor.

The rail transportation system in the State of Maine consists of approximately 1,150 miles of rail track. All railroads in Maine are operated by private sector companies. In fact, Maine state law prohibits the State from operating a railroad. 23 MRSA 7155. Rail transportation is crucial to the well-being of Maine's economy, and is an integral part of interstate and international commerce. Accordingly, the field of railroad safety is generally pre-empted by federal law and regulations promulgated and enforced by the Federal Rail Administration (FRA).

In acknowledgement of the primary federal role, the Executive Order 2013-004, copy attached as Appendix A, required MaineDOT to review available FRA rail safety reports, request FRA reports on MMA inspections, use any available information on the cause of the Lac Megantic tragedy to mitigate any safety concerns, and continue to cooperate with the FRA. The Order also required a report back to the Governor, including any findings and recommendations, within 90 days of the Order.

This report is the result. It summarizes inspections that occurred before and after the Lac Megantic tragedy, the results of a request by MaineDOT Commissioner Bernhardt to Maine's five freight rail companies regarding best practices for securing freight trains, emergency orders that have been issued by federal rail safety regulators in Canada and the United States in response to the events in Lac Megantic, and findings and recommendations.

As set forth below, although no form of transport is free from all risk, it appears that existing rail safety practices are adequate, and that a tragedy like Lac Megantic will not occur in Maine if the private railroad operators follow their own safety practices and those of the FRA, the agency responsible for rail safety in the United States.

2. Safety Inspections Occurring Before the Lac Megantic Tragedy

a. The General Regulatory Framework

As noted above, federal law governs rail activity and the FRA provides oversight and enforcement of railroad safety. FRA rules govern all aspects of rail safety including the following five disciplines: (1) track, (2) grade crossings, (3) mechanical / rail equipment, (4) operating practices and procedures, and (5) movement of hazardous materials. Under FRA regulations, each railroad operator has primary responsibility to ensure its infrastructure and

operations meet or exceed applicable federal safety standards. The FRA conducts periodic, random inspections of the railroads to ensure regulations are being followed and infrastructure properly maintained.

The 1970 Railroad Safety Act authorizes states to work in partnership with the FRA to enforce federal rail road safety regulations. The Act allows state inspectors to be trained and certified by the FRA. The state inspectors are then able to conduct investigative and surveillance activities to ensure the application and interpretation of federal rail safety rules, regulations, orders and standards reflect national uniformity. These state inspectors work in concert with regional FRA inspectors who perform inspections in several states within a designated region.

Pursuant to 23 MRSA § 7312, MaineDOT has participated in the FRA track and equipment safety inspection program since the early 1980s. MaineDOT currently employs a full time track inspector and our rail maintenance manager also acts as a part-time inspector, working closely with the FRA to perform safety inspections on rail track and equipment. The MaineDOT inspectors are delegated certain authority by the FRA as set forth in 49 Code of Federal Regulations, part 212. These certified inspectors file inspection reports with the FRA for necessary enforcement of observed deficiencies or rule violations. Through MaineDOT participation in this program, our inspectors have access to private rail track throughout the state as well as the FRA database containing inspection reports and results of Maine inspections.

Working in cooperation with the FRA, inspection reports were thoroughly reviewed after the Governor's Executive Order to ensure that the ongoing FRA inspection program in Maine is consistent and concentrated in areas of highest rail traffic and/or concern. This type of data review is also done internally at FRA on an ongoing basis to improve its inspection program. In addition, if concerns are raised by the public or if significant data or events show areas of concern, an increased number of inspections and FRA scrutiny comes into play.

b. Focused Inspections Due to Increased Volume of Crude Oil Shipments

In addition to routine random inspections, there have been recent focused inspections on routes that carry bulk crude oil and other hazardous material in Maine.

In July of 2012, the FRA conducted a focused inspection on Pan Am Railways reviewing track conditions within Maine, with particular focus on the Pan Am mainline track.

During the week of May 6, 2013, the FRA conducted another focused inspection on 200 miles of Pan Am track between Portland and Mattawamkeag, and the FRA reviewed over 600 of Pan Am's internal track inspection records.

In June of 2013, FRA inspectors completed additional concentrated inspections and completed a planned FRA Automated Track Inspection (ATIP) of the Pan Am Freight mainline between the New Hampshire border and Mattawamkeag, Maine. Their focused inspection continued onto the Eastern Maine Railway from Mattawamkeag to Brownville, followed onto the Maine Montreal Atlantic track, from Brownville to Hermon. The ATIP car rides over rails

testing for a variety of track conditions simultaneously; highlighting areas of defects or locations where additional on the ground inspection might be needed.

In sum, prior to the Lac Megantic tragedy, there were 1,201 FRA observations performed in 2013 on railroads in Maine across the five (5) disciplines from January through June. Many were focused specifically on the risk posed by increased transport of crude oil. During this process, defects were identified, requiring attention by the railroad operators, however, no defects were found that warranted the shutdown of any rail lines in Maine. Assuming the railroad companies follow established safety procedures, there was no indication from these inspections that a disaster like Lac Megantic could occur.

3. Safety Inspections Occurring After the Lac Megantic Tragedy

The July 6th Lac Megantic tragedy obviously required that FRA inspections be expedited and focused on the MMA.

Accordingly, during the second and third weeks of July, 2013, the FRA conducted focused inspections on the Montreal, Maine and Atlantic Railway, across all five (5) FRA disciplines. The FRA expanded the ATIP inspection program to include additional portions of the MMA lines, Eastern Maine Railway (EMR) lines, and Pan Am Rail lines. Specifically, the inspection program targeted the crude oil and high volume rail routes. Specifically, the ATIP returned to Maine and inspected from Vanceboro on the EMR, to Brownville and then from Brownville on the MMA line to the Canadian border in Jackman. They tested from Brownville to Searsport on the MMA line, and also tested the Bucksport Branch on the Pan Am line. The ATIP car also tested from Maine into Lac Megantic, Québec per a Transport Canada request. The ATIP also tested track as it departed the state back to the Maine/New Hampshire border.

Since July, there have been an additional 581 observations conducted by FRA and state inspectors across the five (5) disciplines. All concerns and defects observed in inspections are documented and forwarded to the railroad being inspected and FRA staff for correction and follow up. During this process, defects were identified, requiring attention by the railroad operators. Again, however, no defects were found that warranted the shutdown of any rail lines in Maine.

4. Industry Best Practices Regarding Securing Parked Freight Trains

The cause of the Lac Megantic disaster is still under investigation by Transport Canada, the federal agency with oversight of rail safety within Canada. A final report may not come for many months. However, the very existence of a high-speed, unattended, runaway freight train carrying hazardous material indicated that certain railway safety practices were either not being followed or could be improved. Statements from MMA officials themselves indicated that the train may not have been properly secured.

To move this discussion forward, on July 17th MaineDOT Commissioner Bernhardt requested each of the Presidents/General Managers of the five freight railroads operating in Maine to voluntarily share their best practices on securing parked freight trains. See copy attached as Appendix B. Asking for voluntary best practices, recognizing that the FRA is the pre-emptive regulator for rail safety in the United States, gave MaineDOT and the rail operators in Maine an inventory of practices in use by the freight railroads with overall rail safety in mind.

As requested, by July 31st MaineDOT received responses from all five of the freight carriers within the State. Most have recently updated or added additional requirements around parked trains due to the Lac Megantic derailment. Early reviews by MaineDOT demonstrated that the following commonalities among most of the railroads.

- Additional and updated training for all engineers and conductors around securing trains, including operational rules as well as TSA training.
- Crew staffing, including two person crews in most cases.
- Train crews are to notify dispatchers whenever a freight train is parked and left, with notification to include that the train is locked, the number of handbrakes that have been set, that the handbrakes have been tested, and if any wheel chocks or derails have been applied.
- Parked trains will be left on mainlines only when no other option is available to the crew, again crew will notify the dispatcher the train is on the mainline and how it is secured.
- All parked trains will have locomotive cabs locked to prevent any unauthorized entry and reverser controls removed. (the reverser is what the engineers use to control the movement of the train)
- Any cars left in a siding without a locomotive attached will have handbrakes set and derails at both ends of the cars or that switches are set so the cars cannot leave the siding.

5. Emergency Orders Issued By Canadian and U.S. Rail Safety Officials

Further review of these practices by MaineDOT were not required, as the federal agencies responsible for railroad safety each issued emergency orders that pre-empted the issue.

On July 23rd, Transport Canada issued a one-page Emergency Directive pursuant to Section 33 of the Canadian Railway Safety Act. This Directive, attached as Appendix C, applies only to railway operations in Canada, but it is indicative of best practices. The Directive requires that railway companies ensure that:

- unattended locomotives be protected from unauthorized entry;
- hand brakes be applied according to Canadian rail operating rules if a train is unattended for more than one hour;
- unattended trains also have the automatic brakes set and the independent brake fully applied;

- all trains carrying "dangerous goods" be left unattended on main track:
- two person crews on trains carrying "dangerous goods".

On August 2nd, the FRA issued Emergency Order 28. A two page News Release summarizing the Order is attached as Appendix D. and the full text of the 23-page Order can be found www.fra.dot.gov/eLib/details/L04719. This Order, which was effective September 1, 2013, required that all railroads undertake the following measures.

- Trains carrying specified hazardous materials on mainline or side track outside the yard must not be unattended.
- Procedures to secure unattended trains carrying specified hazardous materials including locking the locomotive and reporting of the setting of the correct number of hand brakes.
- Communication to dispatchers and recordation of number of hand brakes applied, tonnage and length of train, grade and terrain of track, relevant weather conditions, and type of equipment.
- Training and notification requirements.

MaineDOT was encouraged, as both of these emergency directives were in line with the best practices the state's rail operators reported using or had implemented post-Lac Megantic. MaineDOT believes these new directives will help clarify rules regarding securing freight trains and improve rail safety on both sides of the border.

6. Finding and Conclusions

Based upon the foregoing, and after review of available FRA rail safety reports including MMA inspections and available information on the cause of the Lac Megantic tragedy, MaineDOT makes the following findings and draws the following conclusions.

1) Prior to the Lac Megantic tragedy, there were 1,201 FRA observations performed in 2013 on railroads in Maine across the five (5) disciplines from January through June. Many were focused specifically on the risk posed by increased transport of crude oil. During this process, defects were identified, requiring attention by the railroad operators, however, no defects were found that warranted the shutdown of any rail lines in Maine. Assuming the railroad companies follow safety procedures, there was no indication from these inspections that a disaster like Lac Megantic could occur.

2) Since Lac Megantic tragedy, there have been an additional 581 observations conducted by FRA and state inspectors across the five (5) disciplines. All concerns and defects observed in inspections are documented and forwarded to the railroad being inspected and FRA staff for correction and follow up. Again, during this process, defects were identified, requiring attention by the railroad operators. Again, however, no defects were found that warranted the shutdown of any rail lines in Maine.

3) Although no form of transport is free from all risk, existing rail safety practices appear adequate. A tragedy like Lac Megantic will not occur in Maine if the private railroad operators follow their own safety practices and those required by the Federal Railroad Administration (FRA).

4) MaineDOT should continue to closely monitor the investigation into the cause of the Lac Megantic being conducted by Transport Canada, and should continue to work closely with the FRA to ensure that there are timely safety inspections of our rail infrastructure throughout the state. MaineDOT should follow the implementation of FRA Emergency Order 28 and weigh-in on other proposed rulemaking for improving railroad safety nationally.

List of Appendices

Appendix A – Executive Order 2013-004 – July 9, 2013

Appendix B – Letter Commissioner Bernhardt Letter Requesting Best Practices to Secure Freight Trains – July 17, 2013

Appendix C - Transport Canada Emergency Directive – July 23, 2013

Appendix D – News Release Regarding FRA Emergency Order 28 – August 2, 2013

OFFICE OF
THE GOVERNOR

NO. 2013-004
DATE July 9, 2013

AN ORDER DIRECTING MAINEDOT TO REVIEW THE SAFETY OF FREIGHT RAIL TRANSPORTATION IN MAINE

WHEREAS, Maine has significant rail systems moving freight throughout and across our State;

WHEREAS, this system is crucial to the well-being of Maine's economy, consisting of over 1,100 miles of trackage;

WHEREAS, this rail system is regulated by the federal government and the tracks are owned both by governmental entities and private businesses; and

WHEREAS, a review by the Maine Department of Transportation of our rail system is in order to ensure our system is safe;

NOW, THEREFORE, I, Paul R. LePage, Governor of the State of Maine, hereby order as follows:

1. The Maine Department of Transportation (MDOT) shall:

    a. Review all available safety reports related to railroads in Maine compiled by the Federal Rail Administration, and request additional inspections if warranted;
    b. Request from the Federal Rail Administration a report on the results of inspections of the track, equipment and operations of the Montreal, Maine, and Atlantic Railway;
    c. Utilize information as it becomes available on the cause of the Quebec train derailment to reassess the safety of Maine's rail infrastructure and take appropriate action to mitigate any safety concerns; and
    d. Continue to coordinate cooperation between MaineDOT track inspectors and the Federal Rail Administration.

Appendix A

2. MDOT shall report back to the Governor on any significant findings as they become available, and within 90 days provide the Governor with a progress report on the review and analysis conducted pursuant to this Order, including any findings and recommendations.

The effective date of this Executive Order is July 9, 2013.

Paul R. LePage, Governor

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Paul R. LePage
GOVERNOR

David Bernhardt
COMMISSIONER

July 17, 2013

Dear

RE: Request for Voluntary Best Practices Regarding Securing of Parked Freight Trains

The tragedy in Lac-Megantic, Quebec has caused everyone to reflect on how our transportation industry can provide the level of railroad safety that the public deserves and expects, while at the same time allowing the efficient movement of goods needed to support our economy here in Maine and across North America.

As Canadian officials continue to investigate, no one should jump to conclusions regarding exact causes of the derailment on July 6th. However, the very existence of a high-speed, runaway freight train carrying volatile materials indicates that certain railroad safety practices can be established, improved, or communicated. Of course, we at the Maine Department of Transportation (MaineDOT) understand that the Federal Railroad Administration (FRA) is the pre-emptive regulator of rail safety in the United States. However, pursuant to the Executive Order of Governor Paul R. LePage dated July 9, 2013, MaineDOT wants to facilitate a voluntary, proactive effort to establish reasonable and common sense practices that address the risk of runaway freight trains.

Toward that end, I have directed my staff to work with rail operators in Maine to gather and review best practices regarding the securing of parked freight trains. Specifically, we ask that you submit existing or proposed policies or practices that relate to securing parked trains including parking locations, grades, surrounding terrain, setting of hand brakes, monitoring of trains, timing of crew changes, security, derails, and related training. Obviously, it would be most helpful if the railroads carrying freight in Maine could communicate with each other and agree upon such best practices. Alternatively, your company can separately submit to us suggested practices and related communications by letter or email.

Given the importance of the issue, I request that you submit the requested information to Nate Moulton, MaineDOT's Director of Rail Transportation, by July 31, 2013. After we have heard from you, we hope to document these best practices and that rail operators in Maine will voluntarily agree to follow them until federal rules or guidelines on these topics are issued.

We at MaineDOT hope that you will see this as an opportunity to work together to improve rail safety in Maine, which at the end of the day is the responsibility of all of us, whether we work in public service or private industry.

If you have any questions do not hesitate to contact Nate Moulton or myself.

Sincerely,

David Bernhardt
Commissioner

Emergency Directive Pursuant to Section 33 of the *Railway Safety Act*

Safety and Security of Locomotives in Canada

To: All Railway Companies and Local Railway Companies

Section 33 of the *Railway Safety Act* (RSA) gives the Minister of Transport the authority to issue an emergency directive to any company when the Minister is of the opinion that there is an immediate threat to safe railway operations or the security of railway transportation.

Although the cause of the tragic accident in Lac-Mégantic remains unknown at this time, and although I remain confident in the strength of the regulatory regime applicable to railway transportation in Canada, I am of the opinion that, in light of the catastrophic results of the Lac-Mégantic accident and in the interest of ensuring the continued safety and security of railway transportation, there is an immediate need to clarify the regime respecting unattended locomotives on main track and sidings and the transportation of dangerous goods in tank cars using a one person crew to address any threat to the safety and security of railway operations.

Pursuant to section 33 of the RSA, all railway companies and local railway companies are hereby ordered to:

1. Ensure, within 5 days of the issuance of the emergency directive, that all unattended controlling locomotives on main track and sidings are protected from unauthorized entry into the cab of the locomotives;
2. Ensure that reversers are removed from any unattended locomotive on main track and sidings;
3. Ensure that their company's special instructions on hand brakes referred to in Rule 112 of the *Canadian Rail Operating Rules* are applied when any locomotive coupled with one or more cars is left unattended for more than one hour on main track or sidings;
4. Ensure, when any locomotive coupled with one or more cars is left unattended for one hour or less on main track or sidings, that in addition to complying with their company's special instructions on hand brakes referred to in item 3 above, the locomotives have the automatic brake set in full service position and have the independent brake fully applied;
5. Ensure that no locomotive coupled with one or more loaded tank cars transporting "dangerous goods" as this expression is defined in section 2 of the *Transportation of Dangerous Goods Act* (TDGA) is left unattended on main track; and
6. Ensure that no locomotive coupled with one or more loaded tank cars transporting "dangerous goods" as this expression is defined in section 2 of the TDGA is operated on main track or sidings with fewer than two persons qualified under their company's requirements for operating employees.

For the purpose of this emergency directive an "unattended locomotive" or a "locomotive coupled with one or more cars that is left unattended" means that it is not in the immediate physical control or supervision of a qualified person acting for the company operating the locomotive or car(s) in the case of items 3 and 4 above or a person acting for the company operating the locomotive or car(s) in the case of items 1, 2 and 5 above.

For the purpose of this emergency directive, "main track" and "sidings" do not include main track or sidings in yards and terminals.

For greater certainty, nothing in this emergency directive relieves a company of the obligation to

comply with Rule 112 of the *Canadian Rail Operating Rules*.

Pursuant to section 33 of the RSA, this emergency directive takes effect immediately and is to remain in effect until 23:59 EST on December 31, 2013.

_____
Assistant Deputy Minister
Safety and Security

Date:_____

Related Items

July 23, 2013
News Release - Transport Canada announces emergency directive to increase rail safety

Date modified: 2013-07-24

U.S. Department of Transportation
Office of Public Affairs
1200 New Jersey Avenue, SE
Washington, DC 20590
www.dot.gov/briefingroom

News

FRA 22-13
Friday, August 2, 2013
Contact: Kevin F. Thompson
Tel.: 202-493-6024

Federal Railroad Administration Issues Emergency Order to Prevent Unintended Hazardous Materials Train Movement

WASHINGTON – The U.S. Department of Transportation's Federal Railroad Administration (FRA) today issued an Emergency Order and Safety Advisory to help prevent trains operating on mainline tracks or sidings from moving unintentionally. The FRA's announcement was made in response to the July 6, 2013 derailment in Lac-Mégantic, Quebec, Canada, as it awaits additional data once the investigation into the crash is complete. The actions announced today build on the success of FRA's rigorous safety program, which has helped reduce train accidents by 43 percent over the last decade, and made 2012 the safest year in American rail history.

The Emergency Order is a mandatory directive to the rail industry, and failure to comply will result in enforcement actions against violating railroads.

"Safety is our top priority," said U.S. Transportation Secretary Anthony Foxx. "While we wait for the full investigation to conclude, the Department is taking steps today to help prevent a similar incident from occurring in the United States."

Today's Emergency Order outlines measures that all railroads must undertake within the next 30 days:

- No train or vehicles transporting specified hazardous materials can be left unattended on a mainline track or side track outside a yard or terminal, unless specifically authorized.
- In order to receive authorization to leave a train unattended, railroads must develop and submit to FRA a process for securing unattended trains transporting hazardous materials, including locking the locomotive or otherwise disabling it, and reporting among employees to ensure the correct number of hand brakes are applied.
- Employees who are responsible for securing trains and vehicles transporting such specified hazardous material must communicate with the train dispatchers the number of hand brakes applied, the tonnage and length of the train or vehicle, the grade and terrain features of the track, any relevant weather conditions, and the type of equipment being secured.

- Train dispatchers must record the information provided. The dispatcher or other qualified railroad employee must verify that the securement meets the railroad's requirements, and they must verify that the securement meets the railroad's requirements.
- Railroads must implement rules ensuring that any employee involved in securing a train participate in daily job briefings prior to the work being performed.
- Railroads must develop procedures to ensure a qualified railroad employee inspects all equipment that an emergency responder has been on, under or between before the train can be left unattended.
- Railroads must provide this EO to all affected employees.

"Today's action builds upon a comprehensive regulatory framework we have had in place for some time," said FRA Administrator Joseph C. Szabo. "The safe shipment of all cargo is paramount and protecting the safety of the American public is fundamental to our enforcement strategy and we are encouraged by the industry's willingness to cooperate with this approach going forward."

In addition to the Emergency Order, the FRA, together with the Pipelines and Hazardous Materials Safety Administration (PHMSA), issued a Safety Advisory detailing a list of recommendations railroads are expected to follow. U. S. DOT believes that railroad safety is enhanced through the use of multiple crew members, and the Safety Advisory recommends railroads review their crew staffing requirements for transporting hazardous material and ensure that they are adequate. Other recommendations in the Safety Advisory include: conducting system-wide evaluations to identify particular hazards that may make it more difficult to secure a train or pose other safety risks and to develop procedures to mitigate those risks. A copy of the Safety Advisory can be viewed HERE.

"When PHMSA talks about the transportation of hazardous materials, safety is a prerequisite to movement," said PHMSA Administrator Cynthia Quarterman. "We are taking this action today and we will be looking hard at the current rail operating practices for hazardous materials to ensure the public's safety."

As FRA continues to evaluate safety procedures following the recent crash, it will convene an emergency meeting of its Railroad Safety Advisory Committee to consider what additional safety measures may be required. FRA plans to develop a website that will allow the public to track industry compliance with the Emergency Order and Safety Advisory issued today. FRA has developed a plan that outlines six major actions that have occurred or will occur to further ensure that our regulatory response to the Canadian rail accident remains transparent.

Under current DOT regulations, all freight railroads are required to develop and implement risk assessments and security plans in order to transport any hazardous material, including a plan to prevent unauthorized access in rail yards, facilities and trains carrying hazardous materials. Railroads that carry hazardous materials are required to develop and follow a security protocol while en route; railroad employees are subject to background checks and must complete training. Training programs and protocols are reviewed and audited by the FRA routinely and generally designed to be progressive so as the level of risk increases so does the level of security required. A description of past, present, and proposed FRA actions on this issue can be found here.

###

Exhibit C

CRM FAX COVER SHEET

Compliance and Response Management Inc.
1842 Meriden Waterbury Road PO Box 794, Milldale Connecticut 06467-0794 USA

DATE: **June 12, 1996** NUMBER OF PAGES INCLUDING COVER SHEET: 5

TO: **Tom Morgan, Town Planner**
Town Hall
Newington NH 03801

Office: 603 436-1252
Fax: 603 436-7188

FROM: **Henry Renfrew**
Compliance and Response Management, Inc
PO Box 794
Milldale, CT 06467-0794

Office: 203 276-1919
Fax: 203 620-0071
Beeper: 203 369-8659

RE: **PROPOSED CONDITIONS OF APPROVAL**

Draft received Thursday July 11, 1996 - I will comment further on this proposals by Monday July 16th. I have several meeting today and can only be brief at this time.

#1- NFPA 58 - Good

#2- NFPA 15 - no gaurantee that they will upgrade the system (of course I do believe they will) - change to add systems protected by fixed water spray systems shall be upgrade to comple with NFPA 15 prior to the start of construction.

#3 - I would add acceptable to Fire Chief Wahl here.

#4 - add prior to start of construction

#5 - Good (and very important - good job on this one)

#6 - add in UL Detectors also.

#7 - This is too broad - would fill your safe hundreds of drawings - need to be a little more specific as to what you want and need.

#8 - Very Board - will be hundreds of memos and change orders - etc etc. Will be more specific in my answer on Monday.

#9 - Good - Question what jurisdiction will the planning board have at that time - The Fire Chief will for sure.????? If the additional tank was not coming in - they can use the existing tank "forever" It will take about 2 years to get the new tank in full operation - a few years to learn how to operate it "if the big tank was down for repair" and then scheduling and time of retrofitting - my opinion soonest to realistically do it - 7-10 years which is fine.

#10 - I think this is good but some of their recommendations are covered above - will be more detailed on Monday.

cc: Jim Stannard

Exhibit D

HENRY RENFREW

Compliance and Response Management, Inc.

Phone (203) 276-1919 Fax (203) 620-0071

NEWINGTON PLANNING BOARD
SEA-3'S APPLICATION FOR ADDITIONAL LPG STORAGE
TECHNICAL REVIEW
July 10, 1996

BACKGROUND INFORMATION

On June 10, 1996, the Town of Newington New Hampshire Planning Board requested technical assistance in its review of Sea-3's application for additional storage of refrigerated Liquefied Petroleum Gas (propane) at Sea-3's facility on a private road off Old Dover Road. The scope of work requested was a review and evaluation of the adequacy of:

- emergency response and contingency planning;
- fire protection, monitoring and response systems;
- leakage monitoring systems;
- plant security, communications and emergency notification systems; and

recommending procedural enhancements that would provide an additional margin of safety to firefighters, emergency response personnel, and the general public.

The board also hired Mr. James Stannard to review compliance with the National Fire Protection (NFPA) Standard 58 entitled Storage and Handling of Liquefied Petroleum Gases, other applicable NFPA and American Petroleum Institute (API) standards; and determine if proposed new tank storage and piping, segregation via dike, proposed water spray cannons and alternatives are adequate; and recommend enhancements to provide additional margins of safety.

OVERVIEW OF THIS REPORT

This facility has been in continuous operation since 1975. For over 20 years, Sea-3 has demonstrated a commitment to safety. Operating, safety, and fire protection equipment has been effectively maintained and upgraded through a detailed preventive maintenance program. Process operations and emergency response procedures have been under continuous review and updated. Incidents or problems have been evaluated with new safer equipment being installed and procedures updated. The facility has an excellent safety record.

The existing bulk refrigerated storage tank and other operating and safety equipment have been installed in accordance with existing codes and the manufacturer's installation procedures.

The proposed new additional bulk storage and safety equipment and safeguards will insure system integrity and safety. The next twenty (20) years of operations should mirror Sea-3's safety record for the last twenty (20) years.

There are three code compliance issues that Sea-3 is in the process of complying with.

Two issues involving compliance with state regulations are still being developed by Sea-3.

- Fire Safety Analysis (required by NFPA 58) is required by section 3-10 for the facility and Mr. Bogan is working with Fire Chief Wahl to develop it.
- The available Water supply for the deluge system is being evaluated in accordance with NFPA 15 Dated 1990 Standard for Water Spray Fixed Systems for Fire Protection. Mr. Bogan is contacting a Fire Protection Engineering firm to confirm compliance with NFPA 15 and going to submit the information to the Fire Chief.

One issue involving compliance with federal OSHA regulation is being developed by Sea-3.

- OSHA Process Safety Management (PSM) Standard 1910.119 is being developed by Sea-3 with technical assistance from LGA Engineering of Hanover Massachusetts.

SEA-3 - STATEMENT ON SAFETY, OPERATIONS AND FIRE PROTECTION

The following statement summarizes Sea-3's commitment to safety, operations and fire protection at the facility. The statement was taken from their draft Fire Safety Analysis which is being prepared at this time. A final copy will be available for review by the Planning Board upon completion.

The goal of Sea-3, Inc. is to limit the overall risk to the surrounding industries and communities to as low a level as good engineering and process management will allow. The Sea-3, Inc. facility, through its management and concern for safety, has continually strived for a zero accident policy. The facility was designed and updated over the last twenty years to incorporate the latest in fire detection and prevention equipment. Maintenance of existing equipment and systems has always been a high priority and has resulted in Sea-3 maintaining a safe and efficient operation over the last twenty years. This attitude and engineering will follow through to the new construction.

IMPORTANCE OF THE SEA-3 FACILITY / PROPOSED ADDITIONAL STORAGE

The safety of continuous operations of the facility is important. Sea-3 supplies propane to wholesale and retail propane companies (dealers) located throughout New England. It has been estimated that Sea-3 supplies to these dealers 40% of the propane used by over one million households (1 out of every 16 in New England) and numerous industrial locations. Any interruptions of operations during peak winter months can create a serious heating fuel shortage throughout New England.

For several years, Sea-3 has been operating under difficult circumstances. Because ships delivering product have increased in size, Sea-3 has been required to reduce its inventory on hand to accommodate the capacity of the arriving ships. Any delay in

arrival, during peak demand periods, can consume the remaining on hand inventory before arrival of the new product. Last year for example, Sea-3 ran out of product four (4) times due to scheduling problems and delays in ship arrivals. These conditions create a variety of potential safety problems including:

- off loading product from a ship "under pressure" to get the product to the dealers ASAP; and
- on-site traffic and local road congestion after "out of product period".

The proposed new storage tank will help to eliminate these two (2) potential safety problems. The proposed additional storage will allow the facility to continue delivery of product to dealers without any interruptions with the existing tank basically empty awaiting delivery of product via ship. The traffic into the facility should be more spread out and prevent a crisis backed up of transports waiting to load.

STATE ADOPTED SAFETY STANDARDS

The State of New Hampshire has adopted the NFPA 58 Standard entitled Storage and Handling of Liquefied Petroleum Gases dated 1989. NFPA 58 addresses the design, construction, installation and operation of the proposed new storage tank (Chapter 8 has this specific requirements for the installation of Refrigerated LPG storage.) In Chapter 9 Referenced Publications and considered part of the requirements of NFPA 58, is NFPA 15 Standard for Water Spray Fixed Systems for Fire Protection dated 1985. Fixed water spray systems at the facility include protection of the day tank, loading rack and building with deluge water systems covered by this standard. NFPA 15 covers the design, installation, maintenance, and testing of water spray fixed systems for fire protection.

The State of New Hampshire is in the process of adopting current additions of these standards as state requirements: NFPA 58 1995 and NFPA 15 1990.

Since 1989, NFPA 58 was updated in 1992 and in 1995. In the 1992 edition, the chapter dealing with refrigerated storage was completely rewritten. In the 1995 edition, major changes to the chapter dealing with Marine Shipping and Receiving were made to conform to US Coast Guard regulations.

The State of New Hampshire is in the process of adopting the 1993 edition of the NFPA 72 Standard for the Installation, Maintenance, and Use of Protective Signaling Systems. This standard deals with the application, installation, performance, and maintenance of local, auxiliary, remote station, proprietary, and emergency voice/alarm protective signaling systems, and combinations thereof and their components.

The Authority Having Jurisdiction for public safety issues in these standards is Newington Fire Chief/Fire Marshal Larry Wahl. Technically, only the state adopted editions of these applicable standards can be required by the Fire Chief/Fire Marshal. The Planning Board can assist the Fire Chief/Fire Marshal in ensuring that the most current editions are used for the design, installation of new equipment. See Recommendations to Enhance Safety section of this report.

EMERGENCY RESPONSE AND CONTINGENCY PLANNING

Sea-3 Personnel Emergency Response Training and Preparedness

Mr. Lawrence Heffron, Senior Vice President of Sea-3 is a member of the State of New Hampshire Hazardous Material Transportation Advisory Board which provides guidelines and recommendations on legislation dealing with hazardous materials. Mr. Heffron has been associated with Sea-3 for over 20 years.

Mr. Paul Bogan, Terminal Manager, has been employed at the facility for over 20 years. He has for six years been a member of the NFPA Technical Committee for Liquefied Petroleum Gases responsible for writing NFPA 58. He is Chairman of the Propane Gas Association of New England (PGANE) Emergency Response Committee. The committee is responsible for developing and maintaining a PGANE Propane Emergency Response Plan. The plan has been distributed to all fire department throughout New England. The Committee annually offers a three day hands on propane fire training course for the industry and emergency responders at the Massachusetts Fire Academy. He is one of the instructor for the three day course. In 1989, Mr. Paul Bogan attended a three day fire fighter training course at Texas A & M University which includes training on how to handle large scale LPG (propane) and flammable cryogenic liquid incidents. Based on his training and experience, he is a hazardous material specialist. A Haz Mat Specialist (in this case) is a person with extensive knowledge of the hazards of propane and emergency response procedures.

The employees of Sea-3 receive continuous emergency response training. There are 14 employees and no one new has been hired for over 6 years. Two of the senior employees are Haz Mat Techicians (emergency responders expected to use specialized chemical-protective clothing and specialized control equipment) Every other year, all employees attend the 2 day propane training course a the Massachusetts Fire Academy. New Employees receive two weeks of initial training and orientation.

Newington Fire Department Emergency Response Training and Preparedness

Newington Fire Chief Larry Wahl has been the chief of the department since 1981 (15 years). He has been a firefighter for over thirty (30) years and a member of the Newington Fire Department for over 23 years. He is a member of the State of New Hampshire Hazardous Material Transportation Advisory Board and sub chair of the Water Transportation Committee. This board provides guidelines and recommendations on legislation dealing with hazardous materials. He is also a member of the Port Safety Forum which meets quarterly with the Captain of the Port.

In 1989 - Fire Chief Wahl attended a three day fire fighter training course at Texas A & M University which included training in handling large scale LPG (propane) and flammable cryogenic liquid incidents.

He has responded to prior incidents and inspected the facility on several occasions and participated in several drills and a drafting water from the river training sessions. Chief Wahl is also the town Fire Marshal and responsible for code complaince in addition to fire suppression issues.

Since 1995, 15 Newington firefighters received specific training dealing with hazardous material related incidents and emergencies. Five (5) received initial "awareness", eight (8) operational" and two (2) Haz Mat Technician hazardous material training.

Operational training is designed to help firefighters during initial response in a defensive fashion to control the release from a safe distance and keep it from spreading and protecting nearby persons, the environment, or property from the effects of the release. Hazardous materials technicians training is for emergency responders expected to use specialized chemical-protective clothing and specialized control equipment.

In 1991 seven (7), 1992 two (2), and 1995 one (1) Newington firefighters received training in Incident Command Systems (ICS) which is critical to managing a major hazardous material emergency. ICS training identifies how to establish and enforce scene control including control zones, emergency decontamination, evacuations/in-place protection and communications based on standard operating procedures and local emergency response plans.

Sea-3 Emergency Management and Contingency Plan

Sea-3's Contingency Plan was last updated in June 1987. In the event of a fire at the facility, the Newington Fire Department is notified automatically via signal alarm panel system. Depending on the location, specific valves and equipment are automatically shutdown and in some areas with fixed water spray systems activate prior to notification of the Fire Department.

The response to fire conditions at the facility are not spelled out in the plan. They are in the Sea-3 Interlock schedule which is a cause and effect diagram attached to this report.

Upon arrival of the fire chief, Sea-3's plan clearly places the Fire Chief in charge or the Fire Office in Charge. Sea-3 has prepared a small booklet version of their contingency plan for area emergency responders. During meetings with Chief Wahl and Mr. Bogan, the chief informed Mr. Bogan that the plan and booklet version phone numbers will have to be changed because the State of New Hampshire has enhanced 911 effective July 5, 1995

Town of Newington Emergency Management Plan

The Town of Newington is required by federal and state laws to have a town Emergency Management organization and plan. The current Emergency Management (EM) Plan was written in March 1995 by Eliza Smith, EM Director. On May 25, 1995, Fire Chief Wahl made a minor revision to one section. The plan was approved by the Newington Board on September 29, 1995. The EM Plan is over 70 pages long with function specific responsibilities for town departments outlined in the plan.

In developing the plan, page two (2) states that Hazardous Materials Accidents were the first priority for consideration. There are 14 other categories included man-made and natural disasters and emergencies.

Part II Section H of the Newington EM Plan addresses evacuations. The Fire Department will provide recommendations on areas to be evacuated, assist in traffic control, provide post-evacuation fire surveillance and assist in rescue operations. The Board of Selectman will assume over-all direction and control of the evacuation procedures and make the necessary evaluations and recommendations to protect the lives of the citizens. The EM Director, Police and Highway Departments also have important responsibilities during any evacuations.

In the event of a major fire or emergency at this facility, when in the judgement of the Board of Selectman, The State of New Hampshire Emergency Management Plan can be activated for further assistance.

The Town of Newington Plan was recently tested using a plane crash at Pease with several town departments participating in the drill.

FIRE PROTECTION, MONITORING AND RESPONSE SYSTEMS

Sea-3 has multiple levels of fire protection, monitoring and response systems in place throughout the facility. These levels include hand held fire extinguishers, stationary extinguishers, UV and CV detectors, manual pull fire boxes, water deluge systems and automatic shutdown of equipment. Here is an example of the different types of detection, fire protection equipment and systems and shut down activities at one particular location.

Truck Loading Rack Equipment and Systems.

Hand Held	Dry Chemical 30 # Lb	Hand Held 30 pound
Stationary Units	Dry Chemical 2,000 Lb	Gate Motor
Stationary Units	Dry Chemical 2,000 Lb	Front of Day Tank
UV Detectors	Group #02	#07,#08,#09,#10,#11,#12,#13,#14,#15,#16,#17,#18
Fire alarm Pull Box #2	Exit Gate	By Maintenance Bldg.
Fire alarm Pull Box #2	Entrance Gate	Truck Entrance
C.V. Detectors	Group #02-(4 units)	#05,#06,#07,#08
	Group #03-(4 units)	#09,#10,#11,#12
	Group #04-(4 units)	#13,#14,#15,#16
Water Deluge System	Two zones	each approx. half rack
System Shutdown	Pumps and valves	for product flow

The following portion of this report will list the type of equipment and their locations at the facility for immediate extinguishment of a fire.

Listed below are numbered locations on Hand held Extinguishers.

20 Pound Hand Held Fire Extinguisher

(24) Dry Chemical	Rail Skid	Top Stairs D Skid

(25) Dry Chemical	Raid Skid	Top Stairs B Skid
(25) Dry Chemical	Raid Skid	Top Stairs C Skid
(37) Dry Chemical	Pickup	Rear Bed

30 Pound Hand Held Fire Extinguisher

(01) Dry Chemical	Waiting Room	Beside Front Door
(02) Dry Chemical	Boiler Room	By Transformer
(03) Dry Chemical	Compressor Room	By Personnel Door
(04) Dry Chemical	Maintenance Building	By Roll Door
(05) Dry Chemical	Not Used	
(06) Dry Chemical	Not Used	
(07) Dry Chemical	Maintenance Building	Front Personnel Door
(08) Dry Chemical	Truck Rack	Column Skid C
(09) Dry Chemical	Compressor Room	Front Personnel Door
(10) Dry Chemical	Main Yard	Entrance Truck Skid E
(11) Dry Chemical	Day Tank	Cement Column
(12) Dry Chemical	Boiler Room #2	Front Roll Door
(13) Dry Chemical	Boiler Room #2	Front Door
(14) Dry Chemical	Rail Skid	Riverside Tarstrip
(15) Dry Chemical	Raid Skid	Fence Dike Side

Listed below are numbered locations on Wheeled Fire Extinguishers.

Wheeled Fire Extinguishers

Dry Chemical	Dock	Downstream
Dry Chemical	Dock	Upstream
Dry Chemical	Boiler Room Rear	By Transformer
Dry Chemical	Rails	Tarstrip - Riverside
Dry Chemical	Storage Tank 01	Front of Cold Pumps

Listed below are numbered locations on stationary fixed extinguisher systems..

Stationary Units

Dry Chemical 2,000 Lb	Main Building Rear	Near Storage Shed
Dry Chemical 2,000 Lb	Main Yard Entrance	Gate Motor
Dry Chemical 2,000 Lb	Main Yard	Front of Day Tank
Dry Chemical 2,000 Lb	Rails	Front of Shack

CO2(17)	Compress Room	Front Door
CO2(18)	Maintenance Room	Outside By Window
CO2(28)	Boiler Room	Outside Rear Door
ABC(06) Dry Chemical	Maintenance Room	Inside Front Door
ABC(29) Dry Chemical	Compressor Room	By Exhaust Fan
ABC(30) Dry Chemical	Boiler Room	Center Column
Halon(16)	Motor Control Center	Entrance
Halon(17)	Control Room	Rear Door

Fixed Halon Systems

Halon(35)	Motor Control Center	Rear Boiler Room
Halon(36)	Main Control Panel	Inside MCP
Halon(40)	Compressor Room	By Entrance

The following portion of this report will list the type of detectors and their locations at the facility for immediate detection of fire conditions.

Listed below are group locations of Ultra Violet (UV) Flame detectors and the assigned number of the detector. If one of these detectors activate, the alarm panel sounds in the main office and the person on duty has 12 seconds to observe the conditions by visual or remote TV monitors. At the 13 second of the alarm, automatic shutdown procedures occur and a 120 second delay notification to the Fire Department starts. If during the 120 second period the situation is controlled and minor, the person on duty can stop the scheduled notification to the fire department.

U.V. Detectors

Group #01	Day Tank	#01, #02
Group #02	Truck Loading Area	#07,#08,#09,#10,#11,#12,#13,#14,#15,#16,#17,#18
Group #03	Behind Main Bldg.	#19,#21,#22
Group #04	Storage Tank 01	#25,#26
Group #05	Rail Loading Area	#31,#32,#33,#34,#35,#36
Group #06	Water Loading Dock	#37

PREVENTATIVE MAINTENANCE SYSTEM

The chart format below, will summarize the PMS on various safety related items. During my inspections of the facility, it was apparent there is a supervised active PMS program in place.

Safety Equipment

Monthly	Inspect Fire Extinguishers	Stationary & Wheeled
		Halon Seal & Green Band
		CO2 Weigh
		ABC Seal & Green Band
	Inventory	Available Hose
	Test & Calibrate	UV Detectors CV Detectors
		Halon System MCC)
Quarterly	Check & Inspect	Pull Stations
Semi-Annual	Test (Water Flow)	Deluge System
	Random Test /Setting	Dry Chemical Extinguishers
	Test Alarm	Halon System
Annual	Notification System	Fire Department
	Hydrostatically Test	Fire Hose (125 Lbs pressure)
	Flush With Water	Fire Hydrants
	Test & Calibrate	Shutdowns & Alarms.

Loading Area

Quarterly	Lubricate	Swivel Joints- Loading Skids

Odorant System

Daily	Inspect	Odorant System
Weekly	Inspection	Leakage
Monthly	Refill Pump Oil	bottles

LEAKAGE MONITORING SYSTEMS

The facility leaking monitoring system consists of 43 combustible gas vapor (CV) detectors in groups, usually of 4 units. This system is designed to detect unignited gas. If a detector(s) activates, the main alarm panel indicates via light and horn a problem. The CV alarm system is not tied into automatic fire department notification.

C.V. Detectors 13 Groups/Total of 42 Detectors

Group #01-(4 units)	Day Tank	#01,#02,#03,#04
Group #02-(4 units)	Truck Loading Area 1	#05,#06,#07,#08
Group #03-(4 units)	Truck Loading Area 2	#09,#10,#11,#12
Group #04-(4 units)	Truck Loading Area 3	#13,#14,#15,#16

Group #05-(4 units)	Compressor Room	#17,#18,#19,#20
Group #06-(4 units)	Boiler Room #1	#21,#22,#23,#24
Group #07-(4 units)	Boiler Room #2	#25,#26,#27,#28
Group #08-(4 units)	Storage Tank 01	#29,#30,#31,#32
Group #09-(4 units)	Rail Loading Area 1	#33,#34,#35,#36
Group #10-(3 units)	Rail Loading Area 2	#37,#38,#39
Group #11-(1 unit)	Flare Area	#41
Group #12-(1 unit)	Office Main Panel	#45
Group #13-(1 unit)	Fire Pump	#46

PLANT SECURITY, COMMUNICATIONS AND EMERGENCY NOTIFICATION SYSTEMS.

Sea-3 - Security / Unauthorized Entry / Trespass Features

The facility is located on a private road with little or no public traffic. Signs at the entrance indicate it is a private road. The facility perimeter is surrounded by a 6 foot chain link fence with 3 strands of bobwire pointing out. During darkness, most of the facility is illuminated by lights activated by photoelectric cells. All gates into the facility are normally locked except the truck entrance and exit gates in full view of the main office. During the evenings, weekends and slow traffic periods, the truck entrance and exit gases are also locked. Visitor parking is located outside the fence in full view of the main office.

Sea-3's Safety Standards and Procedures Manual states that entry is limited to authorized person having legitimate reasons for entering and terminal personnel on duty are responsible for enforcement of these restrictions. Furthermore, terminal personnel are instructed to be especially watchful for unauthorized entry during unloading of product from a ship. During offloading, several gates must be open for emergency response and a guard is posted for security during offloading. Procedures are in place for a security alert, potential security threat and imminent security breach at the facility which are coordinated with federal, state and local enforcement and public safety officials.

The facility is manned 24 hours a day by at least two persons on duty. During darkness, personnel on duty are required to perform several security checks and make a complete trip around the dike. There is an in plant hard wired 2 way intercom system and portable radios are also used in outside work areas.

Two TV monitors are in place to view the upper loading rack and lower rail loading and flare areas. These monitors are in continuous view of the employees on duty in the main office area. There is a quick dial number on phones in the office to contact the Newington fire/police emergency dispatch center during the day and the Rockingham Sheriff's office at night.

Communications

There are two basic in-plant systems. One is a hardwire two way communication voice system with intercoms located at the main office, maintenance office, truck and rail loading racks. There is also several portable radios in use at all times by employees. In the event of an emergency involving the fire department, portable radio(s) are given to the Fire Chief or Office in Charge to monitor and maintain direct communications with plant employees.

Emergency Notification Systems.

In a fire, the alarm system for the facility will automatically activate with a light and audible alarm in the main office. After 12 second, if not shutoff, system shutdown turn off various pumps and close several valves automatically. After the initial 12 second, the Fire Department is notified 120 seconds later automatically. There is also six (6) manual fire pull boxes at various locations and audible outside alarms also. Basically each of the 6 locations have three different colored boxes - (1) Fire (2) Fixed Water Spray and (3) System Shutdown.

Fire Alarm Manual Pull Boxes

#1	Office Building	Back
#2	Exit Gate	By Maintenance Bldg.
#3	Entrance Gate	Truck Entrance
#4	Removed	
#5	Rail Area	By Bowl Dike
#6	Flare Area	

Recommendations to Enhance Safety

During meetings with Mr. Bogan and Chief Wahl three regulation/code compliance issues were discussed at length. I informed Mr. Bogan that in my opinion compliance with (1) OSHA Process Safety Management (PSM) Standard 1910.119, Fire Safety Analysis of existing conditions at Sea-3 as required by NFPA 58 section 3-10 and (3) availability of water (which is a subpart of section 3-10) and compliance with NFPA 15 Standard for Water Spray Fixed Systems for Fire Protection was necessary to adequately review and evaluate the safety of the facility with additional storage being added.

Mr. Bogan provided me with a copy of a Process Hazard Analysis (PHA) which meets one portions of the requirements of the OSHA PSM. The PHA identifies and evaluates potential accidents and makes recommendations for procedural and/or equipment changes. The PHA report provided excellent vital information about the accident potentials at the facility. A copy of this PHA has been furnished to the Planning Board.

I recommended to Mr. Bogan that Sea-3 consider a detailed review of the PSM Standard requirements and to include the additional storage in its review. Mr, Bogan agreed and contact LGA Engineering (the company that prepared the PHA). I also informed him that documentation of compliance with OSHA PSM was not necessary at this time. Sea-3 should be in full compliance with the standard at the time the new storage is place in operation.

Since NFPA 58 Section 3-10 requires a Fire Safey Analysis (FSA) and coordinating the analysis with the Fire Chief, I recommended that one be prepared in writing. Mr. Bogan and the fire chief were furnished with a draft outline. I have reviewed the initial draft of this document which Mr. Bogan and the Fire Chief except to have completed this month.

Regarding the availability of water, the last testing of the water supply to the facility was done in 1990. Since that time there has been increased sizing in mains in Newington. At this time there is insufficient information available. Mr. Bogan agreed to contact a fire protection engineering firm and have the availability of water and nozzle sizes etc. evaluated in accordance with NFPA 15 which is adopted by reference in NFPA 58. since this has a direct effect on fire department operations, I recommended that the Fire Chief participate in the evaluation and that the results be forwarded to him.

Based on Mr. Bogan's response to these issues, I believe that Sea-3 will fully comply with any system requirements developed as a result of the work underway on the PSM, FSA and evaluation of compliance with NFPA 15. Furthermore, the Fire Chief is participating fully in the FSA and NFPA 15 issues and is the Authority Having Jurisdiction. If any conflicts arise, the New Hampshire State Fire Marshal can participate given his regulatory authority over these issues.

The follow portion of this report contains five items the Planning Board consider adding as conditions to permitting.

Since the State of New Hampshire is in the process of adopting newer editions of NFPA standards dealing with the installation of the refrigerated LPG storage tank, water spray protection system and emergency alarm systems, the Planning Board should require compliance with these newer standards addressing these important safety issues. The Fire Chief/Fire Marshal can only technically require and enforce the current state adopted editions.

#1 Sea-3 shall comply with the applicable requirements/section of NFPA 58 1995 for the installation of the additional storage tank and associated piping.

#2 Sea-3 shall comply with the requirements of NFPA 15 Standard for Water Spray Fixed Systems for Fire Protection Dated 1990 for any modifications to the existing fixed water spray systems.

#3 Sea-3 shall upgrade the existing protective signal alarm system to comply with the requirements of NFPA 72 Standard for the Installation, Maintenance and Use of Protective Signaling Systems prior to operation of the proposed additional refrigerated LPG storage tank.

These recommendations were discussed with Mr. Bogan and the Newington Fire Chief. The cost of compliance with NFPA 15 and 72 can range from $5,000 to $8,000 dollars.

On July 9, 1996, at a meeting with Fire Chief Wahl and Sea-3 Manager Paul Bogan, during discussions concerning the availability of city water to the facility, Chief Wahl identified the following problems.

In April 1996 there was a break in the 10 inch main water line on the private road just above Sea-3's connection to the line. When Portsmouth Water Department personnel attempted to repair the line by isolating the line from the supply water line on Old Dover

Road, it was discovered that the water curb box (to shut off and isolated the line on the private road was missing). The cause of the missing shut off curb box was apparently due to rebuilding of the private road a few years ago. Because the water curb box was missing, other downstream water curb boxes had to be used which resulted in several other businesses water supplies being shut off until the repair to the water line was completed. This missing curb box created an hazard (no water for sprinkler systems) at several businesses not on the private road.

Further examination of the existing main water line revealed that up stream of Sea-3's connection, there is no isolation valves on the main. With no isolation valves in place, water to Sea-3 has to be turned off. If these isolation valves were in place and shut after the April 96 break, Sea-3 and all the other facilities could of maintained water supply via the loop of the main line shared by ABB and Georgia Pacific.

Chief Wahl and I agreed that adding two isolation valves on the main would enhance safety and help to ensure the safety of Sea-3. Furthermore, Sea-3 and the other businesses serviced by the water main have a responsibility to replace the curb box.

#4 Sea-3 assume responsibility to ensure that the missing water curb box isolating the water main on the private road from the main on Old Dover Road be replaced by October 31, 1966.

(All businesses using water on this main have a responsibility to ensure replacement or the parties responsible for paving the private road. Sea-3 will coordinate this effort and ensure replacement.)

#5 Sea-3 arrange with the Portsmouth Water Department to have one isolation valves added upstream of the facilities connection and another down stream of the connection by the blue building of ABB Combustion Engineering.

These recommendations were discussed with Mr. Bogan and he estimated the cost of installation approximately $10,000 to $15,000 dollars.

SEA-3 Inc. INTERLOCK SCHEDULE

Rev. Jan. 24, 96

					EMG. S/D					FIRE						EQUIPMENT														PROCESS VALVES																				REFRIGERATION EQUIPMENT								
		HORN	LAMP	CHK SYS OPS	TRANSFER LOAD	FLARE	REFRIGERATION	SHIP	RAIL S/D	BLDG DELUGE	DAY TK DELUGE	TRUCK DELUGE	FIRE. PUMP	NEWT ALARM	EXT. SIREN	COLD PUMPS	WARM PUMPS	UNLOAD COMP	LOAD SKIDS	BLDG. HVAC	MCC HVAC	VAPOR BLWR	COMP RM FANS	BOILER #1	BOILER #2	FLARE BLOWER	FLARE PILOT	DIKE SUMP 1 & 2	RAIL SUMP	RP 002 SHIP	RB 021 SHIP	RP 007 SHIP	RP 187 SHIP	RP 188 SHIP	RB 152 SHIP	RP 016A PUMPS	RP 026 PUMPS	PCV 045	RB 050 PUMPS	RB 050A PUMPS	HCV 040 XFER	RB 172 TRUCK	RP 710 FUEL GAS	PDCV 065	HCV 153 REFG.	RP 196 REFG.	PCV 142 FLARE	RP 197 FLARE	PCV 110 VAP.	C1 SULZER	C2 HOWDEN	C3 HOWDEN	C4 HOWDEN	CP 6 PANEL	AO 01 FREON	AO 02 PRO/GYL	P 4 .5 6 RAW/WTR	P 78 GLY/PUMP
E S	[illegible] liquid	X	L	X	X				X		X		X	X	X	X	X	X	X																	X	X		X	X	X	X	X															
	LSH 110 liquid	X	L																																														X									
	LSH 211 liquid	X	L				X																																							X			X	X	X	X	X	X	X	X	X	X
	RP 026 valve open		L	X												X																																										
	RB 050 valve open		L	X													X																																									
	RP 050A valve open		L	X													X																																									
EQUIPMENT S/D	TRUCK LOAD SKIDS	H	L														X		X																																					
	RAIL LOAD SKIDS	H	L														X		X																																					
	RAIL UNLOAD COMP	H	L															X																																						
	REFRIG. COMP. C-1	H	L																																															X								
	REFRIG. COMP. C-2	H	L																																																X							
	REFRIG. COMP. C-3	H	L																																																	X						
	REFRIG. COMP. C-4	H	L																																																		X					
	BOILER ROOM #1	H	L																				X																																	
	BOILER ROOM #2	H	L																					X																																
	FLARE PILOT /BLOWER	H	L																						X	X																					X										

Exhibit E

FAX TRANSMISSION

STANNARD & COMPANY
P.O.BOX 175
BASKING RIDGE, NJ 07920-0175
(908) 766-7300
FAX: (908) 766-7301

To: TOM MORGAN

Fax #: (603) 436-7188

From: JIM STANNARD

Subject: Sea-3 Conditions

Date: July 15, 1996

Pages: 1, including this cover sheet.

COMMENTS:

In my response of Friday, I neglected to mention that the waiver by the Planning Board and Chief Wahl of the clearance distances, as specified in NFPA 58, should be mentioned in any resolution to be voted on by the Planning Board. The NFPA wording is:

> "9-3.3—The edge of a dike, impoundment, or drainage system intended for a refrigerated LP-Gas container shall be 100 ft (31 m) or more from a property line that can be built upon, a public way, or a navigable waterway."

It was agreed, at the meeting, that the waiver would be on the basis of retroactivity and the fact that the set-back requirements that are already in place will provide more than the 100 ft. Clearance distance.

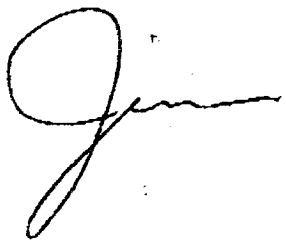

Exhibit F

STANNARD & COMPANY
ENGINEERS
P.O. BOX 175, BASKING RIDGE, NJ 07920 (908) 766-7300, FAX (908) 766-7301

June 17, 1996

Mr. Marlon S. Frink, Chairman
Newington Planning Board
Town of Newington, NH

VIA FAX

Dear Mr. Frink:

It was a pleasure to make your acquaintance over the phone on Saturday evening. You asked that I provide you with a few thoughts regarding the permitting process for the new Sea-3 refrigerated propane tank.

First, I would comment that the *Safety Standards and Procedures Manual*, the *Contingency Plan*, the *Mooring Policy and Procedure Manual* and the *Material Safety Data Sheet Handbook* that have been prepared and submitted by Sea-3 are all excellent and in keeping with the dedication toward safety that seems to be a hallmark of the Sea-3 organization. Likewise, the U.S. Coast Guard's *Contingency Plan* appears to be complete and well thought out.

The Quality Assurance manuals of both CBI and Pitt-Des Moines are well-prepared policy statements regarding the design, procurement and inspection policies of each of those companies however neither one of them specifically addresses a refrigerated propane tank that is to be designed, fabricated and tested in accordance with NFPA 58 and API 620. Those issues, of course, belong in the specifications and the contract between the purchaser and the builder and would not be included in such a general policy statement.

The *Hazard Modeling Study for Additional Tankage* that was prepared by Flour Daniel, in my mind, is less than adequate in that it is based upon the WASH-1400 data base that even the NRC has long ago discredited. I believe that the numbers that have been generated in this particular study may overstate the risk by several orders of magnitude. Furthermore, after determining the risk of the initiating event, there is no mention of any mitigating measures that could prevent or deter the escalation of that initiating event into a major event. Those mitigating measures

will assure a safe operation.

The one drawing entitled *Fire Control Systems & New Tank Position* is quite interesting, but it lacks the specific details that are necessary to judge the technical adequacy of either the fire control systems or the tank itself. I realize that the final design drawings have not been completed and ready for release. However I am of the opinion that conceptual P&IDs illustrating the interconnection of the new and old piping, as well as the basic control logic should have been included in their submittal to you.

Chapters 9 and 10 of NFPA 58 specifically address the concerns that must be addressed at the Sea-3 facility. In addition, there are other provisions elsewhere in NFPA 58 that are germaine to the overall facility. The transfer operations addressed in Chapter 10 are already in place and should not be a subject of the current permitting process. However, Chapter 9 is totally pertinent to the proposed added tank and selected portions of Chapter 3 will clearly involve the piping tie-ins and boil-off refrigeration modifications.

Among the applicable portions of the standard are provisions that adopt, by reference, both ASME B31.3, *Chemical Plant and Refinery Piping*, and API 620, *Design and Construction of Large, Welded, Low-Pressure Storage Tanks*.

> **3-2.8.1**—All metallic LP-Gas piping shall be designed and installed in accordance with ASME B31.3, *Chemical Plant and Petroleum Refinery Piping*. All welding and brazing of metallic piping shall be in accordance with ASME *Boiler and Pressure Vessel Code*, Section IX.
> **9-1.6**—All piping that is part of a refrigerated LP-Gas container shall be in accordance with ASME B31.3, *Chemical Plant and Refinery Piping*. This container piping shall include all piping internal to the container, within the insulation spaces, and external piping attached or connected to the container up to the first circumferential external joint of the piping. Inert gas purge systems wholly within the insulation spaces are exempt from this provision.
> **9-1.1.2**—For pressures below 15 psi (103 kPa), API 620, *Design and Construction of Large, Welded, Low-Pressure Storage Tanks*, including Appendix R, shall apply.

Both Section IX of the ASME *Boiler and Pressure Vessel Code* and ASME B31.3 have specific requirements dealing with inspection and the qualification of inspectors. In addition, NFPA 58 specifically addresses the subject of inspection of refrigerated containers during construction and prior to commissioning in 9-1.9:

> **9-1.9-Inspection of Refrigerated LP-Gas Containers.**
> **9-1.9.1**—During construction and prior to the initial operation or commissioning, each refrigerated LP-Gas container shall be inspected or tested in accordance with the provisions of this standard and other applicable referenced codes and standards. Such inspections or tests shall be adequate to assure compliance with the design, material specifications, fabrication methods, and quality required by this and the referenced standards.
> **9-1.9.2**—The inspections or tests required by 9-1.9.1 shall be the responsibility of the operator who shall be permitted to delegate any part of those inspections to his or her own employees, to a third party engineering or scientific organization, or to a recognized insurance or inspection company. Each inspector shall be qualified in accordance with the code or standard that is applicable to the test or inspection being performed.

Furthermore, API 620 is very specific in its qualification of inspectors and it clearly requires that the inspectors shall be employed by the purchaser or an organization regularly engaged in making inspections. I believe that you have had some verbal assurances that the provisions of the applicable codes will be strictly adhered to. However, I do believe that those assurances should be reduced to writing in the permitting process.

NFPA 58 also addresses the subject of geotechnic and seismic qualification of the site. Those items should have been considered prior to any design or construction and the reports should be available at this time for evaluation.

NFPA 58, in section 3-10 requires the preparation of a fire safety analysis as well as incident planning that has been coordinated with the emergency handling agencies. I believe that Sea-3's Contingency Plan is evidence of such coordination and planning in the past. However I also believe that a fire safety analysis is in order at this time. Furthermore, I believe that such a fire safety analysis would serve a more useful purpose than the Hazard Modeling Study that was submitted.

I do not believe that an agency, such as the Newington Planning Board, should be involved with the business decisions of an applicant. However, I do believe that permitting agency should be provided with documentation that will permit the agency to act responsibly. Furthermore, I do not know whether or not the State of New Hampshire has adopted NFPA 58. If not, I would recommend that the Planning Board specifically include compliance with NFPA 58 as a condition of any permit.

My past experience with Sea-3 has given me considerable confidence that they intend to construct a safe facility that is in full compliance with all the applicable codes. However, I do believe that those intentions should be fully documented as a part of their application.

Sincerely,

James H. Stannard, Jr.

Exhibit G

A TECHNICAL REVIEW

OF THE PROPOSED ADDITIONS

TO

SEA-3'S

NEWINGTON MARINE TERMINAL

FOR THE PLANNING BOARD

OF THE

TOWN OF NEWINGTON, NEW HAMPSHIRE

by

JAMES H. STANNARD, JR

July 10, 1996

Stannard & Company
Basking Ridge, New Jersey

BACKGROUND

Sea-3, Inc. owns and operates the Newington Marine Terminal in Newington, New Hampshire (Port of Portsmouth) for the purposes of importing, storing and reselling propane. The terminal is located on the Piscataqua River and shares a pier with the adjacent tank farm that receives, stores and distributes refined petroleum products. In addition to the tank farm, there are several other nearby industrial operations along the river in the same vicinity that could be best described as an industrial area.

The terminal receives fully refrigerated propane (at -44° F) by ship and it is also equipped to receive propane at ambient temperature by rail. The propane is currently stored as a refrigerated product in a single 400,000 barrel (63,600 m^3) externally insulated container. The resale, or distribution, of the product is at ambient temperature, in "over-the-road" propane transport vehicles that are owned and operated by others. It is possible to load railcars in the same siding used for the potential receipt of product. However, there have been few receipts or deliveries by rail in the past and it would appear that few, if any, are contemplated in the future. The terminal has been in continuous operation since 1975 with an unblemished safety record. During that period, there have been several hundred shiploads of propane that have passed through the terminal without a significant incident.

In recent years, a number of new refrigerated gas ships have entered the trade and those ships have a larger capacity than the ships in service when the terminal was constructed. Many of the newer ships have a cargo capacity that almost equals the total capacity of the present storage container at the terminal. The economics of a marine terminal, such as Sea-3's, dictate that the terminal be capable of receiving a full ship load with each delivery. In order to make room for a full load, it has often been necessary for the operators of the terminal to essentially deplete their entire inventory before each ship's arrival. Considering the uncertainty of the weather and the day to day availability of ships,

such a policy has caused a near complete shutdown of the terminal sales upon several occasions because of the lack of supply.

In order to eliminate the probability of future supply shortfalls, the management of Sea-3 has decided to add the additional refrigerated storage container that was envisioned at the time of the original plant design. That second tank, which was shown as a "future tank" on the drawings submitted to the Town of Newington in 1974 as a part of the initial permitting process, will provide the necessary cushion after the inventory has been drawn down to accommodate a full shipload of product.

Sea-3 has retained Fluor Daniel, Inc. to act as the project manager for the proposed addition. Fluor Daniel's initial assignment was to prepare the preliminary design concept, bid specifications and permitting documents as the first step in making that additional storage space available. Sea-3 has applied to the Town of Newington's Planning Board for the approval of those plans and permission to proceed with the project with the issuance of a building permit. In turn, the Planning Board has retained this writer and Mr. Henry L. Renfrew as experts to review those plans and to advise the Board as it deliberates the merits of the project. This report will attempt to address the technical issues as they relate to public safety and to review the present conceptual plans with respect to compliance with relevant codes and standards.

Mr. Renfrew and I have met several times with Mr. Paul Bogan, Sea-3's Terminal Manager, and Mr. George King of Fluor Daniels who have provided us with additional drawings and documents that were not available at the time of the public meeting on June 20. In addition, both of us have had the opportunity to examine specific items of equipment in the facility and to review relevant records that are kept at the terminal.

EXISTING FACILITY

The Newington Marine Terminal was constructed during the period 1974-75 and was commissioned in 1975. While the design of portions of the facility conformed to the then relevant requirements of the 1972 edition of the National Fire Protection Association's (NFPA) standard NFPA 58 *Standard for the Storage and Handling of Liquefied Petroleum Gases,* the terminal was sited, designed and constructed to comply with the American Petroleum Institute's (API) 1970 edition of API 2510, *The Design and Construction of Liquefied Petroleum Gas Installations at Marine and Pipeline Terminals, Natural Gas Processing Plants, Refineries and Tank Farms,* which was the recognized compliance document at that time.[1] The storage container was designed, built, inspected and tested by the Pittsburgh-DesMoines Steel Company (now Pitt-DesMoines Corp.) in compliance with the then recommended rules API 620 *Recommended Rules for Design and Construction of Large, Welded, Low-Pressure Storage Tanks.*

The existing storage container has a capacity of 400,000 bbls, (16,800,000 gallons or 63,600 m^3). It is of a single wall, welded construction that utilizes low temperature steel, in accordance with API 620 Appendix R, surrounded by a composite wood and aluminum foil insulation system. The tank was erected upon a reinforced concrete ringwall and its foundation incorporates an electrically powered heating system to prevent the formation of a frost lens that could damage the tank. Its design maximum working pressure is 1.8 psig. The design boiloff rate for the insulated container is only 4,214 lb/hr. or 0.12 %/Day.

The design of both the vapor and liquid handling systems are such that there should be no venting of propane to the atmosphere as the result of any normal, and most

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[1]The National Fire Protection Association's standard NFPA 58, *Standard for the Storage and Handling of Liquefied Petroleum Gases*, did not include marine terminals within its scope until the 1989 edition, and that coverage was deferred to the API 2510 standard prior to that edition.

abnormal, operations of the facility. All process relief valves, hydrostatic relief valves and drains are directed into a closed vent collection system that terminates at the flare. All excess vapor that is generated through normal boiloff, barometric pressure changes, pump recirculation or displacement during transfer is reliquefied with the cold liquid returned to storage. All normal transfer operations from either ships or railcars include the use of a vapor return line which precludes the need to vent vapor during the transfer operation.

The reliquefaction system is generously sized to accommodate vapor generation from all of those sources, even when they occur simultaneously. If the reliquefaction system should prove to be incapable of handling the total vapor generation either because of equipment problems or because the total vapor generation volume simply overwhelms its capacity; the total vapor stream, or a portion of the stream, will be diverted to the flare. The flare is sized to accommodate and safely dispose of any and all excess vapor generation of the entire facility. The flare pilot remains lit at all times so it can safely dispose of any potential excess release of vapor generated for any reason throughout the facility. The transfer of propane to the transports is into the vapor space of the transport so as to also prevent either a vapor return or atmospheric venting.

In addition to those redundant vapor handling systems that control the pressure within the main storage container, the tank is also provided with four emergency relief valves discharging directly to the atmosphere. Those relief valves, which have been sized for fire exposure plus all other normal sources of vapor generation within the container, such as pump recirculation, in accordance with API 2000 *Venting Atmospheric and Low-Pressure Storage Tanks,* provide a third level of redundancy against tank over-pressuring. It should be noted that an unimpeded, vertical jet of light hydrocarbon gases, such as propane, will be diluted below the lower flammable limit (LFL) within a very short distance.

Therefore, the operation of the emergency relief valves will not create any additional hazards.[2]

There are three submerged liquid connections into the storage container (*i.e.*, they enter the container below the liquid level). All three of those lines are arranged or valved so as to prevent an uncontrolled flow of liquid from the tank in the event of a piping or equipment failure. This is consistent with the concept of *product control*, or retention, that has been promoted through many added requirements contained in the last several editions of NFPA 58

The smaller one of the three connections, which is a 3" IPS, is intended for use only when the tank is to be completely emptied and to be taken out of service. That connection also provides a small tap for the liquid side of a differential pressure transmitter (ΔP), which is one of the several liquid level gauges measuring the liquid content of the tank. That 3" pipe has been provide with a blind flange on its outlet valve so as to prevent an accidental spill from that point. That blind flange will only be removed to permit the final drainage of the last few inches of propane when the tank is being taken out of service. Therefore that relatively small penetration, which will be supervised when used, should present no threat as the source of a spill.

There is one 14" connection that enters the tank horizontally through the wall of the vessel. That connection is the "fill line", serving the ship unloading line and the return from the reliquefaction system. The direction of flow in that line is always into the tank. A check valve has been provided next to the manual valve which is adjacent to the tank penetration. In addition to the check valve and manual valve, there are also pneumatically operated fail-safe valves in that line that can shutoff the line in an emergency.

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[2]See Appendix A-6.1.1 NFPA 59 *Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants*, 1995 edition.

The 12" "liquid withdrawal line", which penetrates the floor of the container is equipped with a manual valve followed, almost immediately, by a pneumatically operated fail-safe valve. All of the pneumatically operated valves in the liquid lines that were mentioned above, are of a fail-safe design, are a part of the plant emergency shutdown system (ESD), can be closed locally or remotely and they will automatically close if they are exposed to the heat of a fire. Also, there are automatic emergency shutdown (ESD) valves located ahead of the hoses at the dock area as well as similar valves at all of the transfer stations.

With the combination of the automated tank valves and transfer valves, the maximum credible liquid spill within the facility should be less than the liquid inventory within the piping systems. From a more practical point of view, the maximum spill would be limited to the inventory within a piping subsystem, such as the ship liquid line, which is not interconnected with the truck loading system and the reliquefaction. Furthermore, because of the redundancy that has been incorporated into the systems, a major spill would require the simultaneous failure of two or more independent devices to even initiate such an event.

In addition to the many accident, or initiating incident, avoidance features that have been incorporated into the design of the facility, the plant has been well equipped with numerous *fire protection* systems including emergency shutdown systems that may be initiated either automatically or manually at numerous locations throughout the facility. The fire protection systems include fire detection, combustible gas detection and automatic water spray systems on buildings or equipment that could be adversely affected by fire exposure. Many of those systems, as well as basic plant equipment, have been voluntarily up-graded over the years as a result of code changes, operating experience, recommendations resulting from the periodic safety audits by outside consultants and finally the recommendations of the Hazard Analysis Team who prepared the *Initial Process Hazard Analysis* (IPHA). Furthermore, the plant personnel have been well trained in their normal

duties as well as emergency procedures and they are required to immediately report any observed equipment or procedural deficiencies.

PROPOSED ADDITIONAL TANK AND ACCESSORIES

As indicated above, Sea-3 is seeking permission to install the second storage container that was originally contemplated at the Newington Marine Terminal. That second container will have a net capacity of 160,000 bbls (6,720,000 gallons or 25,440 m^3). Sea-3 has agreed that the new container, its associated piping and modified reliquefaction equipment will comply with the 1995 edition of NFPA 58 and the 1990 edition of API 620, which is adopted by reference in NFPA 58 and is now a standard that has been retitled as, *Design and Construction of Large, Welded, Low-Pressure Storage Tanks.* (It might be noted that there have been significant additions to NFPA 58 during the last two decades, including separate chapters devoted to refrigerated storage, marine terminals and the concept of *product control* or retention during emergencies.) Since the additional storage capacity will have virtually no effect upon the throughput of the facility there will be no necessity to alter either the receiving or delivery transfer systems.

A soils investigation of the proposed tank site has been completed, as required by NFPA 58, and it has been determined that the location within the present dike area is suitable and that the foundation design will be based upon the soils engineer's report. It has also been determined that only a slight improvement to the existing dike will be required to achieve the capacity requirements of NFPA 58 when the volumetric displacement of the new tank is considered. The proposed location of the second container will also comply with the clearance distances and other siting criteria of NFPA 58 and will not place any of the existing equipment or piping out of compliance with the original siting criteria. However an unresolved issue with respect to the clearance distances, as required by the later editions of NFPA 58, between the existing dike and an adjacent property line may require some action by either the Board or the Fire Chief.

At the request of the Newington Planning Board, Sea-3 and Fluor Daniel prepared a *hazard modeling study*, which has already been presented to the Board. The writer is of the opinion that the study greatly overstates many of the risks because of the use of an inappropriate data base and the failure to recognize equipment designed to mitigate an initiating event. However, that study could be the basis for the fire safety analysis presently being undertaken by Sea-3 and Fluor Daniel as mandated by NFPA 58 in section 3-10.2.3. It should be evident that the NFPA Technical Committee was thinking of the conventional ambient temperature, pressurized storage of propane when they drafted the language for the requirements for the fire safety analysis. However the concept of, *product control* as expressed in the second paragraph of 3-10.2.3, is quite appropriate for a refrigerated storage container.

> "The first consideration in any such analysis shall be an evaluation of the total product control system including emergency internal and shutoff valves having remote and thermal shutoff capability and pull away protection."

Sea-3 has provided preliminary flow diagrams detailing the proposed piping modifications, including the connections and valving of the new tank. Those drawings, which will be the basis for the final engineering drawings, also indicate Sea-3's plans to upgrade the existing tank (TK-01) after the second tank is in service. Not only do those drawings indicate that Sea-3 intends to duplicate the product control valves that were installed with the first tank, but they also are planning to provide remotely operable internal valves on the active liquid lines, a check valve on the penetration of the overhead cool-down line and fail-safe pneumatic operators on the vapor valves that are on the roof of the tank. Furthermore those same drawings reveal that Sea-3 intends, as an additional safety measure, to retrofit the present tank with internal valves as well as the valve operators and a check valve on the top entry lines after the second tank is in service and when there is an available time "window" to take the original tank out of service.

The flow diagrams, coupled with the plot plan, clearly indicate that the interconnection of the piping of the original and new tanks will be very simple and all in the vicinity of the existing product transfer pumps. Essentially, the concept is to make the two tanks operate as one. The second tank will be of the same vertical height and on the same elevation so that there can be no gravitational overfilling of either tank. It will be possible to separate the tanks, if required for operation or maintenance reasons. For example, the two tanks will be separated during the time that the retrofit of the old tank takes place and the tank has been purged to permit entry and hot-work inside. The normal operation will be to have the withdrawal lines of both tanks always open to a common manifold and the boil-off and vapor transfer lines always interconnected and open.

The flow diagrams also indicate that the flare system and the reliquefaction system will be upgraded to accommodate the additional vapor generation that may result with the installation of the new tank. In addition, the fire water system will be extended into the impounding area to permit the installation of two remotely controlled water monitors. Those two monitors will be located so as to permit the application of either solid streams, spray or fog onto the surface of either tank or onto the piping and pumps located between the two tanks.

The plot plan indicates that the second tank will block the line-of-sight observation of the tank valves and product pump area from the control room. In order to compensate for that loss, the plans also call for the addition of closed circuit TV cameras (CCTV) to permit the operators to have a continuous and unobstructed view of that area. It might be noted that the *hazard modeling study* mentions that gland leaks from the transfer pumps are not uncommon, though easily controlled. For that reason alone, the addition of the CCTV is an important part of the proposed modification.

Both NFPA 58 and API 620 contain specific language that requires the owner to be responsible for the testing and inspection, as well as specifying the qualifications of the

inspection personnel. Sea-3 has designated Fluor Daniels, in their role as project manager, as the owner's inspection agency of both the facility and the tank during construction and prior to placing the facility in operation. That inspection and testing, which may take the form of auditing the contractor's inspection, will be in addition to that normally performed by the contractor. Furthermore, Sea-3 has agreed to retain an independent fire safety engineering consultant to oversee all phases of the construction so as to assure safe procedures during the construction phase of the project. That consultant will be given full authority to monitor the entire project for potentially unsafe conditions and to stop or curtail any activity, by either Sea-3 or the contractor, which he may deem to be unsafe or imprudent.

CONCLUSIONS

After a thorough review of the presently available documents and after several site visits, the writer is satisfied that the proposed additions to the Newington Marine Terminal have been given proper consideration with regards to both on-site personnel and public safety. The proposed changes and additions do not compromise the codes or standards under which the plant was original designed and constructed and will not create any new risks or significantly increase even the perceived existing risks to the Town of Newington.

A refrigerated propane tank is not subject to the *Boiling Liquid Expanding Vapor Explosion* (BLEVE) that has become the perceived nemesis of the Fire Services. Likewise, the catastrophic failure of a refrigerated container that has been designed, constructed, inspected, tested and utilizing the material specified in API 620 is most improbable. The combination of the design criteria and metallurgical properties specified by API 620, if verified by inspection and good quality control, will produce a container that remains ductile at its design temperature, which means that an obvious and observable leak would develop long before a "brittle" failure could occur.

If such a container were to become involved in an engulfing fire, the results might be spectacular but they would not have a major impact upon the surrounding neighborhood. The boiling liquid within the container would act as a heat sink that would prevent the overheating and failure of the shell below the liquid level, thereby preventing the uncontrolled or catastrophic release of the tanks remaining contents.

The combination of good design and construction coupled with the exemplary operations and maintenance practices should minimize the probability of any incident occuring that could escalate to significant proportions. Furthermore, the product control, or retention, capabilities that have been incorporated into the plant design philosophy should limit the magnitude of any incident that might occur. With the later addition of the internal valves and valve operators on the original tank, the concept of product control will be complete.

The writer has not seen a final version of the fire safety analysis that is being prepared by Sea-3 and Fluor Daniels. However, the writer is satisfied that no serious hazard exists and that the safety systems and fire protection systems, including *fire prevention systems,* are quite sufficient, with the possible exception of some additional combustible gas detection systems in the vicinity of the three transfer pumps.

It was noted earlier that one unresolved code compliance issue remains. When the facility was permitted and constructed in the mid 70's, the recognized code document was the APU stand API 2510. While that standard included impoundment as a requirement, it specified clearance distances from the wall of the container. Since that time, the API standard has been replaced by the NFPA standard as the code of compliance. The NFPA standard contains the following provision:

> **"9-3.3—The edge of a dike, impoundment, or drainage system intended for a refrigerated LP-Gas container shall be 100 ft (31 m) or more from a property line that can be built upon, a public way, or a navigable waterway."**

The plot plan, as submitted in 1974 and the most recent plot plan, clearly indicate that the top of the dike along the southern boundary of the property is only about 80' from the property line and is considerably closer along the northern boundary. It could be argued that the property to the north is a tank farm and the property line could not be built upon. However the property to the south belongs to one of the industrial neighbors who probably will not, but could, encroach as close as 20' from the property line.

It is the writer's opinion that the facility was in compliance with the API 2510 standard when it was built and that the additional tank and its accessories will not add a significant risk to its immediate neighbors, let alone the Town of Newington. On that basis, I believe that it would be appropriate to consider the location of the second tank as being "grandfathered" under the original building permit that was issued in 1974. I believe that such a decisision would be consistent with the intent of the retroactivity clause in NFPA 58, which reads:

> **"1-1.5 Retroactivity.**—The provisions of this standard are considered necessary to provide a reasonable level of protection from loss of life and property from fire and explosion. They reflect situations and the state of the art prevalent at the time the standard was issued.
>
> Unless otherwise noted, it is not intended that the provisions of this document be applied to facilities, equipment, appliances, structures, or installations that were in existence or approved for construction or installation prior to the effective date of the document, except in those cases where it is determined by the authority having jurisdiction that the existing situation involves a distinct hazard to life or adjacent property. Equipment and appliances include stocks in manufacturers' storage, distribution warehouses, and dealers' storage and showrooms in compliance with the provisions of this standard in effect at the time of manufacture."

RECOMMENDATIONS

It is my recommendation that either the Newington Fire Chief or the Planning Board, acting as the *Authority Having Jurisdiction* as defined by NFPA, waive the requirements of NFPA 58, section 9-3.3 with regards to the clearance distance from a "property line that can be built upon on the basis that the concept of the second tank was approved in the original building permit in 1974 and that the additional tank creates no new or additional risks to either the general public or Sea-3's immediate neighbors. NFPA's definition of the Authority Having Jurisdiction reads:

> **Authority Having Jurisdiction.**—The organization, office, or individual responsible for approving equipment, an installation, or a procedure.
>
> NOTE:—The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.

On the basis of the information that has been made available to me and the inspections that I have made, it is my recommendation that the Planning Board of the Town of Newington approve the plans and submissions of Sea-3, Inc with respect to the planned additions at the Newington Marine Terminal with the following conditions

1. That Sea-3's inspection agency, which will most likely be Fluor Daniels, submit to the Planning Board prior to the cooldown of the new tank an affidavit that the design, construction, inspection and tests of the facility have been in conformance with the applicable codes and standards. If there have been any deviations from those codes or standards, such deviations shall be noted and explained.

2. That Sea-3 provide some additional combustible gas detectors, possibly of the optical type if they prove acceptable to Sea-3 from a reliabilty standpoint and appropriate for the location.

It is also my recommendation that Sea-3 pursue their planned up-grade of the existing tank, which will add significantly to the safety of the facility. That up-grade includes the installation of the internal valves and equipping the valves at the top of the tank with either operators or check valves as appropriate. It should be understood by the Planning Board that such an endeavor is a major undertaking that will require careful planning, taking the tank out of service for several months and possibly curtailing the throughput of the terminal during that period. Therefore it would be inappropriate to establish either a start or completion date at this time.

Exhibit H

HENRY RENFREW

Compliance and Response Management, Inc.

Phone (203) 276-1919 Fax (203) 620-0071

July 16, 1996

Mr. Marlon S. Frink, Chairman
Newington Planning Board
Town Hall
Newington, NH 03801

Re: Conditions of Approval - Sea-3's proposed LPG Tank

Dear Mr. Frink:

I have finished my review of the proposed conditions for approval of Sea-3's proposed new additional storage and have the following general comments.

#1 Several of the conditions need a specific dates of complaince or implementation.

#2 Some of the conditions are very board in nature and need further clarification.

Comments on each proposed condition:

#1 Sea-3 shall comply with the applicable requirements of NFPA 58 (1995 edition) for the installation of the additional storage tank and associated piping.

Recommended Change:

#1 Sea-3 shall comply with the applicable requirements of NFPA 58 (1995 edition) for the installation of the additional storage tank and associated piping. ***Section 9-3.3 of NFPA 58 1995 requiring 100 feet of separation from the edge of the dike to the property line that can be built upon, a public way, or a navigable waterway is non applicable. The existing dike is acceptable under Section 1-1.5 Retroactivity and considered grandfathered.***

Comments: The grandfathering of the dike need to be added. NFPA 58 1995 Section 1-1.5 Retroactivity addresses this issue and is included below for your review.

1-1.5 Retroactivity.

The provisions of this standard are considered necessary to provide a reasonable level of protection from loss of life and property from fire and explosion. They reflect situations and the state of the art prevalent at the time the standard was issued. Unless otherwise noted, it is not intended that the provisions of this document be applied to facilities, equipment, appliances, structures, or installations that were in existence or approved for construction or installation prior to the effective date of the document, except in those cases where it is determined by the authority having jurisdiction that the existing situation involves a distinct hazard to life or adjacent property.

Equipment and appliances include stocks in manufacturers' storage, distribution warehouses, and dealers' storage and showrooms in compliance with the provisions of this standard in effect at the time of manufacture.

#2 *Sea-3 shall comply with the requirements of NFPA 15 (1990 Edition) for any modifications to the existing fixed water spray systems;*

Recommended Change:

#2 *Sea-3 shall comply with the requirements of NFPA 15 (1990 Edition) for any modifications to the existing fixed water spray systems* ***and NFPA 25 (1995 Edition) for the inspection, testing and maintenance of the fixed water spray system prior to the erection of the new tank.***

Comments: *The phrase prior to the erection of the new tank is a specific reference point in construction. It means the before the side wall of the proposed tank are added vertically to the foundation, the fixed water spray system must be in compliance with NFPA 15 and 25. It is important that the systems to protect the equipment is up to date because of the potential hazards of construction activities.*

The reason to add NFPA 25. NFPA 15 is entitled Standard for Water Spray Fixed Systems for Fire Protection and dated 1990. The NFPA recently developed the first edition of a new standard NFPA 25 1995 entitled Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems which addresses maintaining the Water Spray Fixed Systems at the Sea-3 facility. NFPA 25 provides instruction on how to conduct inspection, test, and maintenance activities. It also stipulates how often such activities are required to be completed. Requirements are provided for impairment procedures, notification processes, and system restoration. This type of information, where incorporated into a building maintenance program, enhances the demonstrated favorable experience of all water-based fire protection systems. Chapter 7 of NFPA 25 1995 in section 7-1.1 states This chapter provides the minimum requirements for the routine inspection, testing, and maintenance of water spray protection from fixed nozzle systems only.... Furthermore section 7-1.2 states NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection, shall be consulted to determine the requirements for design and installation, including acceptance testing.

#3 *Sea-3 shall upgrade the existing protective signal alarm system to comply with the requirements of NFPA 72 prior to operation of the proposed additional refrigerated LPG storage tank*

Recommended Change:

#3 *Sea-3 shall upgrade the existing protective signal alarm system to comply with the requirements of NFPA 72* ***acceptable to the Newington Fire Chief*** *prior to operation of the proposed additional refrigerated LPG storage tank*

Newington Sea-3 Project

Comments: *My original proposal did not include the phrase acceptable to the Newington Fire Chief. That is because within the standard the fire chief works with Sea-3 to ensure compliance. Adding the phrase makes sure that the alarm system is not just built and completed but clearly acceptable to fire chief prior to operation of the storage tank. It must be finished and public emergency response satisfied of the alarm system operations.*

#4 *Sea-3 shall arrange with Portsmouth Water Works to have one isolation valve added upstream of the facility's connection and another downstream of the connection by Combustion Engineering's blue building.*

Recommended Change:

#4 Sea-3 shall arrange with Portsmouth Water Works to have one isolation valve added upstream of the facility's connection and another downstream of the connection by Combustion Engineering's blue building ***prior to the erection of the new tank.***

Comments: *The phrase prior to the erection of the new tank is a specific reference point in construction. It means the before the side wall of the proposed tank are added vertically to the foundation, the isolation valves must be in place. It is important that the water supply system is protected by these isolation valves because of the potential hazards of construction activities on scene during erection of the new tank.*

#5 *Recommend proposed language.*

#6 *Sea-3 shall install additional combustible gas detectors at locations acceptable to the Newington Fire Chief.*

Recommended Change:

~~*#6 Sea-3 shall install additional combustible gas detectors at locations acceptable to the Newington Fire Chief.*~~

Comments: *I would recommend deletion of this condition. Sea-3 has clearly indicated that additional detectors will be located between the new and old tank in plans and several other references including condition #10. As far as locating the detectors, that is based on the manufacturers recommendation.*

#7 *Agree with Mr. Stannard's comments. How broad this is needs to be clarified.*

#8 *It is not clear to me what the Planning Board has in mind. Reports? That could be hundreds.*

#9 *Agree with proposed condition. Of concerns to me is if the board desires to add a time period here as to when the retrofit needs to the done. I do not think one should be imposed. If asked my opinion as to the earliest they could retrofit and maintain operations and safety, I would say 7-10 year from now.*

#10 *I agree with Mr. Stannard's recommendation to limit compliance to Part 9.0 Proposed Operating System Safety Equipment and Safeguards of the draft Fire Safety Analysis dated July 1996.*

I believe these condition will improve and maintain the effectiveness of plant fire protection and safety monitoring systems; plant and public emergency planning, operations and response; and provide an additional margin of safety to firefighters, emergency response personnel, and the general public.

In closing, I wish to add that Sea-3 has operated safety for over 20 years and these conditions will help ensure another 20 years of safe operation of the facility.

Yours truly,

Henry Renfrew

Henry Renfrew

Exhibit I

STANNARD & COMPANY
ENGINEERS
P.O. BOX 175, BASKING RIDGE, NJ 07920 (908) 766-7300, FAX (908) 766-7301

July 12, 1996

Mr. Thomas J. Morgan, Town Planner
The Town of Newington
205 Nimble Hill Road
Newington, NH 03801

Dear Tom:

I have reviewed your FAX regarding the Proposed Conditions of Approval for Sea-3's new propane tank and I have the following comments:

With respect to item (6) dealing with the combustible gas detectors, I wish to apologize for leaving out an important phrase in my recommendations. On page 9, of my report, I mentioned the gland leaks in the transfer pumps with respect to the addition of the CCTV. However, I also had intended to make the application of my recommendation regarding the combustible gas detectors applicable to only the transfer pump location. I do not believe that additional detectors, other than those already specified by Sea-3 in their FSA are necessary as they are more of a process tool than a reliable emergency detection device. Furthermore, I do not believe that you should put the Fire Chief in the position of designing Sea-3's facility.

My intent of suggesting the possibility of utilizing the optical type detectors was the hope of achieving a broader area of surveillance than the present diffusion type heads provide. I also wanted to leave the decision as to the type of unit up to Sea-3 because the optical type may prove to be inappropriate for that particular service. I might add, that my only exposure to the optical type units has been through advertisements and none of my clients have tried them. Therefore, I would not feel comfortable in speciifiying them.

With those thoughts in mind, I would recommend that item (6) be revised to incorporate my second requirement with the addition of the area of the transfer pumps. That provision would then read:

> That Sea-3 provide some additional combustible gas detectors to monitor the three transfer pumps, possibly of the optical type if they prove acceptable to Sea-3 from a reliability standpoint and appropriate for the location.

With respect to Item (7), I believe that this requirement of the submission of an as-built plan should be limited to a site

plan, and possibly a P&ID if the Fire Chief and Mr. Bogan decide that such information could be valuable to the Fire Department. A complete set of plans for the facility could easily amount to several hundred drawings that would mean nothing to the Town.

I am not sure what was intended with Item(8), as there will be a myriad of reports generated by the owner, Fluor Daniels, the contractor, local, state and Federal agencies, *ad infinitum,* in the course of the project. I really believe that the provisions of Item (5) should prove adequate for the Board and the Fire Chief. Therefore, I would recommend that Item (8) be deleted.

I would also suggest that the first sentence of Item (10) be changed to read:

> In addition to the above conditions, Sea-3 shall comply with all of their stated commitments included under part 9.0 **PROPOSED OPERATING SYSTEMS SAFETY EQUIPMENT AND SAFEGUARDS** in the *"Sea-3, Inc. Newington Marine Terminal Fire Safety Analysis"* (FSA) draft report dated July 1996.

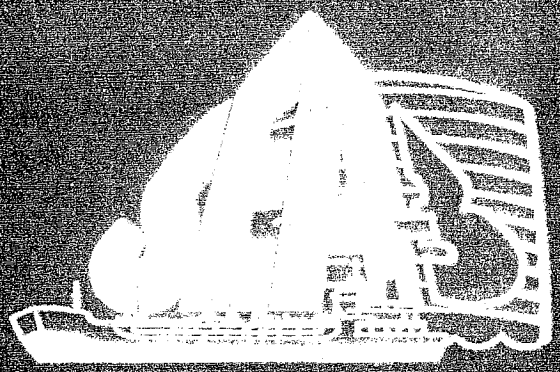
That addition would not only make the requirement more explicit, but would also prevent any future arguments regarding the intent of either Sea-3 or the Planning Board. I do believe that section 9.0 of the FSA adequately covers the items that Mr. Bogan addressed at the July 10 meeting.

It has certainly been a pleasure to work with the Planning Board and I would be more than happy to review any final language before it is adopted or to review any material submitted to the Board or the Fire Chief by either Sea-3 or Fluor Daniels.

Sincerely,

James H. Stannard, Jr.

Exhibit J



SEA-3, Inc.
Newington, New Hampshire

LPG Import Terminal

Hazard Modeling Study for Additional Tankage

May 1996

FLUOR DANIEL

TABLE OF CONTENTS

3.0 METHOD

3.1 General Approach

At the core of this hazard modeling study is a set of specified incident cases. Each incident represents a separate loss-of-containment scenario which may pose some degree of risk to exposed individuals. The list of cases is by no means exhaustive, but the selected cases are intended to be representative of a range of event types which could occur.

Each incident case was simulated to determine the potential effects if the incident were to happen. This was done using a state-of-the-art computer simulation program. The software uses fundamental equations of chemistry, physics, and thermodynamics to accurately model the behavior of hypothetical releases.

In addition to this analysis of consequences, the likelihood of each case was estimated. Toward this end, a survey of relevant data on equipment failures was conducted. The data survey was designed to identify and utilize available data which were most relevant to the Sea-3 facility.

3.2 Definition of Failure Cases

The release cases were selected based on engineering judgement and with reference to the recently conducted Process Hazards Analysis (PHA) study. The PHA utilized the "What-if" technique, which is a standard method for hazard identification and is one of the techniques specifically listed in the U. S. OSHA 1910.119 regulation.

One of the first steps in the hazard modeling study was a review of the PHA report. All cases where the PHA identified a possibility of loss-of-containment were highlighted and considered as candidates to be modeled. Following this, a meeting was conducted with members of the PHA team to discuss the candidates and make further suggestions.

Based on this selection process, the cases listed in Table 1 were determined to be a representative group.

3.3 Description of Failure Cases

The case descriptions given in Table 1 provide a concise characterization of each case and are relatively self-explanatory. Provided below are more detailed descriptions, which explain some of the assumptions and specificities which had to be conceived in order to develop a model for each case.

Table 1 List of Incident Cases

Case #	Case Description
1	Failure of a pump seal on one of the cold product pumps
2	Failure of the 2" line on the cold pump discharge piping
3	Failure in the 12" expansion joint on the suction side of the cold product pumps
4	Failure in the expansion joint in the area of the 16" fill line on the LPG tank
5	Instantaneous release of entire tank inventory

Pump Seal Leak

A typical event which can be expected to happen during the lifetime of any petroleum, chemical, or petrochemical facility is the failure of a mechanical seal on a pump. Typically, this event will have insignificant consequences. The only effect worthy of consideration is the relatively unlikely event that the released propane is ignited immediately and a jet fire ensues, producing a small ellipse of thermal radiation effects. With this in mind, this case was conservatively modeled as a ¼" leak with immediate ignition.

Downstream Pump Discharge Line Break

A loss-of-containment event which is more significant than a pump seal leak is a rupture of the pump discharge pipe. The case is modeled as a rupture of a 2" pipe, i.e., one of the branch lines associated with the pump discharge. The pressure driving the release is taken to be the pump discharge pressure.

Expansion Joint Failure on Pump Suction Line

With regard to larger loss-of-containment scenarios, the most credible leak sites are the expansion joints within the system. With this in mind, the third case was taken to be a failure of the 12" expansion joint on the suction side of the product pumps. This is modeled as having an equivalent hole diameter equal to 25% of the pipe diameter. Thus, it is modeled as a 3" hole at the normal operating pressure of the pump suction line.

Expansion Joint Failure on Tank Fill Line

Another event included in the analysis was a failure of the expansion joint on the 16" tank fill line. This line only contains propane during a filling operation, so the failure was modeled as occurring during such time. As above, the case is modeled as a significant crack in the joint, equal to 25% of the pipe diameter. Thus, the case is modeled as a 4" hole in the fill line at the operating pressure during a filling operation.

Instantaneous Release of Tank Inventory

Although no cases were identified for such an event anywhere in the world, this case is included solely at the request of the Newington Planning Board and for hypothetical reasons only. The case is modeled as an instantaneous release of 15,000 metric tons of refrigerated propane into the existing diked containment area.

4.0 CONSEQUENCE ANALYSIS

4.1 Input Data

The analysis of the consequences of a simulated release requires a considerable amount of data describing the release and the surrounding area. General types of input data include:

- Release conditions
- Meteorological conditions
- Other ambient/geological conditions
- Material properties

The material properties needed to model the cases are built into the software program. For modeling purposes, the releases were treated as pure propane.

4.1.1 Release Conditions

Release conditions include process conditions, such as pressure and temperature, and also other features which describe the release, such as hole size and release inventory. The process conditions were provided by Sea-3 personnel. Line sizes, valve locations, and other necessary inputs were obtained by a review of relevant Piping and Instrumentation Diagrams (P&IDs) obtained from Sea-3 personnel and projected to exist with the new installation.

The more important input data describing each case are given in Table 2.

4.1.2 Weather Conditions

In order to characterize the behavior of the vapor cloud upon release, it was also necessary to obtain data describing the typical and worst-case weather conditions in the area around the terminal. The most important of these data are wind speed and atmospheric stability.

Wind direction was not considered to be a critical piece of input. Despite the existence of a predominant wind direction, it is certainly the case that the wind blows toward each different direction (with greater or lesser probabilities) on different days throughout the year. Thus, hazard distances were calculated without regard to wind direction.

Table 2 Input Data for Each Case

Case #	Case Description	Process Conditions		Hole Diameter (in)	Comments
		Temp. (°F)	Press. (psig)		
1	Failure of a pump seal on one of the cold product pumps	-42	125	¼	
2	Failure of the 2" line on the cold pump discharge piping	-42	125	2	
3	Failure in the 12" expansion joint on the suction side of the cold product pumps	-42	21	3	Liquid head pressure for maximum liquid level of 95 ft
4	Failure in the expansion joint in the area of the 16" fill line on the LPG tank	-42	50	4	
5	Instantaneous release of entire tank inventory	-42	0	--	Maximum inventory of 15,000 tons

It was decided to use the following two weather categories to represent the range of conditions which could occur:

- Pasquill Stability Class *D* - 10 mph
- Pasquill Stability Class *F* - 3 mph

Pasquill stability categories range from *A* to *G*, with class *A* representing the least stable atmosphere. Class *D* is representative of neutral conditions (typical clear, daytime conditions) and stability class *F* indicates stable conditions. Typically, dispersion distances are greatest for stable air, at low wind speeds, i.e., the hazard zone tends to decrease with increasing wind velocity.

4.1.3 Other Ambient Conditions

Other ambient conditions which affect the case modeling is as follows:

- Ambient Temperature - 80°F
- Relative Humidity - 70%
- Surrounding Terrain - Open countryside; some hills

4.2 PHAST Software

The consequence analysis was carried out using PHAST (Process Hazards Analysis Software Tool), which is a state-of-the-art software package for conducting such studies. PHAST allows engineers to examine the progress of a potential incident from initial release, through the formation of a cloud and/or pool, to its dispersion. The program automatically applies the correct entrainment and dispersion models as the conditions change. PHAST integrates these models such that the transition from one behavior pattern to another is smooth and continuous.

For operating plants, PHAST can help to identify the major sources of hazard from releases of toxic or flammable materials. Action can then be taken to reduce the hazard and/or to establish emergency procedures.

The program's results are presented in tables which show the concentrations and flammable effects against distance for a range of weather conditions and wind speeds.

Hazardous Releases

The consequences of a release from process equipment or pipework vary depending on such factors as physical properties of the chemical, its toxicity or flammability, weather

conditions and mitigation factors. The effects may impact plant personnel or inhabitants of surrounding houses. Buildings both onsite and offsite may be damaged.

When using PHAST, the engineer defines the release scenario by specifying the equipment involved. This could be, for example, the rupture of a vapor line from a pressurized storage tank. From the material released, line size and tank information, PHAST estimates the discharge and dispersion rates to calculate the ground level concentrations along the path of the release. Blast and radiation effects are also calculated for flammable materials.

Discharge

Pipe and tank leaks and ruptures, relief valve venting, reactor runaway and tank explosions are some of the causes of a hazardous release. The volume of material and its release rate are key factors in determining the effects.

PHAST calculates the release rate and velocity for the conditions specified by the user. The release may be liquid, vapor or mixed phase from an atmospheric, pressurized or cryogenic tank.

The catastrophic failure of a tank is modeled by PHAST as an instantaneous release whereas a leak or rupture releases material over a period of time. The release rate may be affected by heat from an external fire or from an internal reaction.

Dispersion

When a vapor or volatile liquid is released, it forms a cloud which may, or may not, be visible. The cloud is carried downwind as vapor and as suspended liquid droplets and is dispersed by mixing with air until the concentration falls to a safe level. PHAST automatically determines the quantity of droplets in the cloud and also calculates the distance to pre-defined concentrations.

The cloud initially expands rapidly because of the energy of the material until the pressure drops to atmospheric. A heavy cloud spreads over the ground and air is entrained due to the momentum of the release. The turbulence of the cloud assists uniform mixing.

As concentration drops, atmospheric turbulence becomes the main mixing mechanism and a concentration profile develops across the cloud. PHAST predicts which phenomena manifest themselves, the sequence in which they occur and calculates all related parameters.

The main factors in determining the relevant phenomena are:

- Cloud Density
- Height and Direction of Release
- Discharge Velocity
- Storage Temperature
- Ground Conditions
- Weather

4.3 Hazardous Effects Considered

A number of distinct hazardous effects were considered in this analysis and are discussed in turn below.

Jet Fire

A jet fire results when a high-momentum release ignites very close to the source of ignition. The result is a jet of ignited material oriented in the direction of the release which presents an elliptical footprint of thermal radiation effects, where the edges of the ellipse represent the thermal radiation endpoint criterion. The hazard distance is reported as the distance to the downwind edge of the ellipse. This conservatively assumes that there are no obstacles in the path of the jet.

Pool Fire

A pool fire results when a liquid spill of flammable material is ignited. Radiation effects can be felt downwind of the pool. The hazard distance is reported as the distance to a set radiation level.

Flash Fire

A flash fire occurs when a dispersing cloud of flammable vapor encounters an ignition source at some distance downwind from the release point. The result is a short-lived flame which "flashes back" toward the source of the release. In a flash fire, the flame speed is low enough (ca. 14 ft/s) such that no overpressure wave is produced. The effect distance for a flash fire is given as the dispersion distance to the LFL (Lower Flammable Limit), since this is the farthest point downwind at which ignition could occur.

Vapor Cloud Explosion

A vapor cloud explosion originates similarly to a flash fire. The difference is that the

flame speed approaches sonic velocity, thereby producing an overpressure wave, which will potentially result in a circle of blast damage. This analysis conservatively assumes that the blast circle will be centered about the ignition source. Thus, the maximum hazard distance can be considered as the dispersion distance to the LFL plus the blast radius, since this is the farthest distance downwind at which the blast damage will be realized.

4.4 Endpoint Criteria

As a released vapor cloud travels downwind, it becomes less and less concentrated, eventually reaching a point where it is no longer considered hazardous. A dispersion model produces a concentration vs. distance profile for the release and can produce results down to very low concentrations. Generally, the results of the calculation are reported at a specific point of interest. The conditions at which the models are commanded to stop are referred to as the *endpoint criteria*. The results of a dispersion model are often given as the distance at which this endpoint is reached.

Propane, like other flammable materials, has *flammable range* of concentrations where a mixture of flammable gas and air can be ignited. The flammable range is bounded by the *limits of flammability*, viz., the *Upper Flammable Limit (UFL)* and the *Lower Flammable Limit (LFL)*. At concentrations above the UFL the cloud is too rich to support ignition; below the LFL the mixture is too lean. Thus, after a cloud of flammable material has dispersed below its LFL concentration, it is no longer capable of supporting ignition and may therefore be considered non-hazardous.

Thus, for purposes of this study, the hazard distance for vapor dispersion effects is defined as the distance to the LFL of propane, or 2.15% by volume propane to air. Similarly, for other effects, the hazard zone is taken as the distance to a suitable endpoint criterion. Since all wind directions must be considered, the hazard zone may be thought of as a circle, centered about the point of release, with a radius equal to the hazard distance. This is illustrated in Figure 1.

It then remains to define the endpoints for the various types of hazardous effects. These are given in Table 3.

Figure 1 Illustration of Hazard Zone

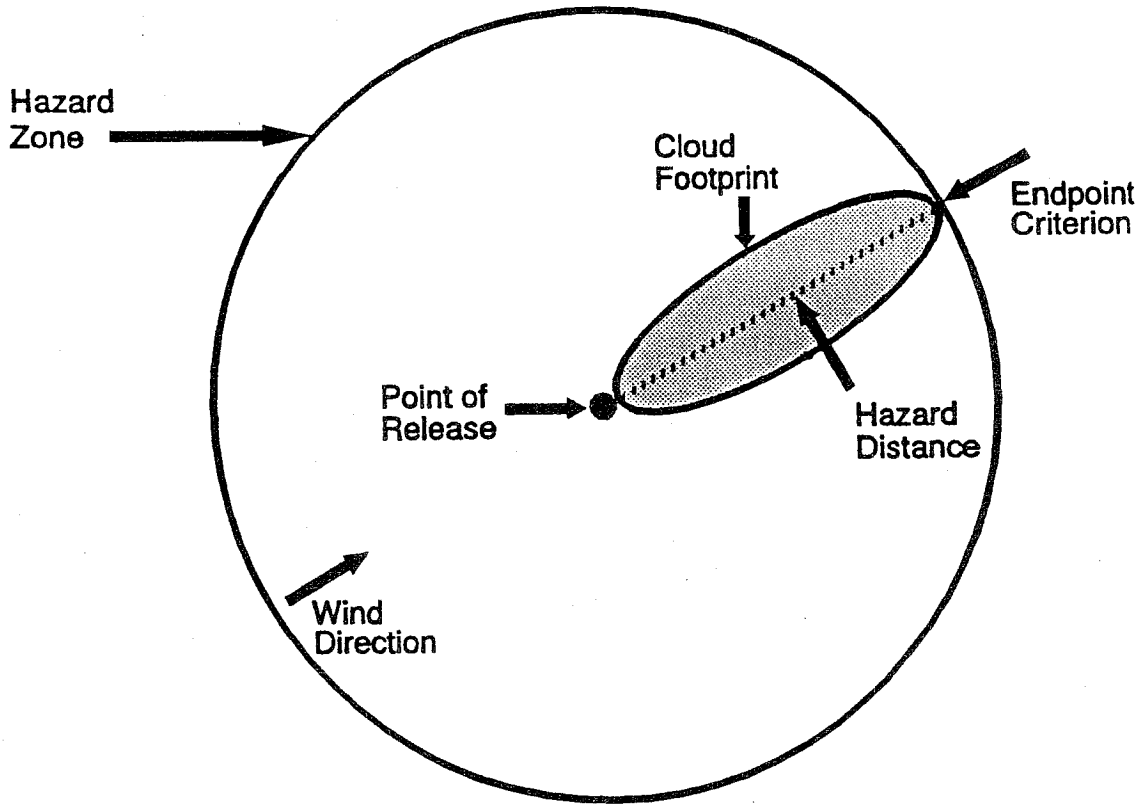


Table 3 Endpoint Criteria for Flammable Effects

Flammable Effect	Endpoint Criterion	Comments
Thermal Radiation	4000 BTU/ft^2	Pain threshold reached in 4 seconds; significant chance of injury/fatality for extended exposure
Vapor Dispersion	Lower Flammable Limit (LFL) concentration	Concentration reported as measured along cloud centerline
Overpressure	Overpressure level of 5 psig (i.e., 5 psi greater than atmospheric pressure)	Major damage to buildings and process equipment; significant chance of injury/fatality for individuals inside exposed buildings

4.5 Consequence Modeling Results

Table 4 summarizes the results of the consequence models for each case. The results in the table are for the weather condition giving the largest hazard zone for each particular case. Typically, this is the high wind speed condition (Class D Stability) for thermal radiation effects, and the Class F stability case for dispersion and overpressure effects.

Table 4 Consequence Modeling Results

Case #	Case Description	Hazard Distance (ft)			
		Jet Fire Radiation	Pool Fire Radiation	Vapor Dispersion	Overpressure
1	Pump Seal Leak	90	-	72	-
2	Pump Discharge Line Failure	-	-	233	87
3	Failure of 12" Expansion Joint	-	256	640	186
4	Failure of 16" Expansion Joint	-	337	955	245
5	Instantaneous Release	-	839	7746	1615

Note: Two weather conditions were considered for each case -

- Class D Stability @ 10 miles per hour
- Class F Stability @ 3 miles per hour

5.0 PROBABILITY ANALYSIS

The probability analysis focussed on calculating the *initiating event* frequencies for the seven selected cases. This was accomplished by the use of available data on equipment failures, historical experience at the Sea-3 facility, and recognized techniques for failure data analysis.

5.1 Applicability of Data

There are a number of sources for equipment reliability and failure rate data. It is essential to determine the applicability of a particular source for a given use. Failure rates will differ for equipment operating in dissimilar services and environments. Furthermore, the rates quoted by the various sources may be inconsistent for reasons pertaining solely to the method of data collection. Accordingly, in most cases, it is necessary to conduct a thorough search through the various sources to find the most useful data for a given application.

To be useful the data applied must meet two important criteria:

- the data must be relevant to the industrial application under consideration
- the data base must be extensive, so that the data obtained have statistical significance

The data selected for use in this study are thought to be representative of the equipment reliability which can be expected at the Sea-3 facility.

5.2 Application of Data

Case 1 - Pump Seal Leak

As documented in the PHA report, Sea-3's experience at their facility indicates that a pump seal can be expected to leak on the average of once per year. This is roughly representative of industry experience as a whole with regard to mechanical seal failure. Note that this is the frequency of a seal leak only; the frequency of a seal fire must include the conditional probability of ignition and will therefore be significantly lower. ***No seal fires (or other fires) have ever occurred at the Sea-3 facility.***

Case 2 - Pump Discharge Line Failure

The data for pipe failures was taken from the WASH-1400 data base. WASH-1400 was

a landmark risk assessment in the nuclear industry, and the data generated for that study have been used in subsequent risk assessments in various industries. WASH-1400 gives a range of values for pipe failures. For pipe diameters less than 3", the most conservative estimate is a rupture frequency of 3×10^{-8} per hour, which equates to 2.6×10^{-4} per year. This equates to one event every 3846 years. ***No such events have ever occurred at the Sea-3 facility.***

Case 3 - Failure of 12" Expansion Joint

The WASH-1400 data gives a frequency of 3×10^{-7} per hour for expansion joints. Converting the units to a yearly frequency results in an estimate of 2.6×10^{-3} per year. This value compares well with data found from other sources, e.g., Green and Bourne. This equates to one event every 385 years. ***No such events have ever occurred at the Sea-3 facility.***

Case 4 - Failure of 16" Expansion Joint

It is likely that this case would have a frequency somewhat lower than Case 3, since the size of the event is somewhat larger. However, no data were found which present expansion joint failure rates in relation to the size of the associated pipework. Accordingly, this case was conservatively assumed to have the same frequency as the previous case, or 2.6×10^{-3} per year (one event per 385 years). ***No such events have ever occurred at the Sea-3 facility.***

Case 5 - Instantaneous Release

No data were found for this case. That is, no instances were identified where a tank of similar construction, in similar service, suffered this type of accident. Failure rates for *pressurized* tanks are in the range of 1 / 10,000 per year to 1 / 1,000,000 per year. It is likely that the failure rate for this *refrigerated* tank would be one to two orders of magnitude lower than this. ***No such events have ever occurred at the Sea-3 facility.***

5.3 Summary of Event Likelihoods

Table 5 presents the initiating event likelihoods for each case.

Table 5 Initiating Event Frequencies

Case #	Case Description	Initiating Event Frequency (/year)
1	Pump Seal Leak	1
2	Pump Discharge Line Failure	1 / 3846
3	Failure of 12" Expansion Joint	1 / 385
4	Failure of 16" Expansion Joint	1 / 385
5	Instantaneous Release	No instances were identified where a tank of similar construction, in similar service, suffered this type of accident. Failure rates for *pressurized* tanks are in the range of 1 / 10,000 to 1 / 1,000,000 per year. It is likely that the failure rate for this *refrigerated* tank would be one to two orders of magnitude lower than this.

6.0 STUDY BASIS / ASSUMPTIONS

Of necessity, a number of estimations and approximations have been made throughout the course of this study. Furthermore, there are a number of sources of uncertainty associated with some of the input data which were used as a basis for the risk calculations. However, this in no way detracts from the usefulness of the numbers generated. It is important to understand the sources of uncertainty and the effect of each on the final results of the study.

In general, the various assumptions upon which the study is based have been noted throughout the text. The following list summarizes the more important general assumptions, introduces and explains some of the more specific assumptions, and describes the nature of the uncertainty introduced by each.

- The estimates and assumptions made throughout the course of this analysis were based on the best judgement of the analyst. However, when dealing with safety issues, it is advisable wherever necessary to err on the side of conservatism. By definition, an estimate or assumption which is conservative is one which would tend to *overpredict* the associated risk, i.e., it is somewhat pessimistic. Thus, throughout the study, when faced with a choice of two reasonable approaches or assumptions, the more conservative alternative was selected.

- Throughout the course of the probability analysis, a considerable amount of historical data was used. While the data employed in this study are thought to be the best available, the statistical uncertainties associated with this type of information are unavoidable.

- As with any consequence analysis, the number of different discretely identifiable loss-of-containment scenarios is considerable. As is often the case, it was necessary to select a small number of release scenarios to serve as a representative set. Effectively, each case represents a range of scenarios of similar type. Thus, a set of process conditions used to model a particular release actually represents a range of conditions at which that release might actually occur. The implicit assumption here is that the consequences do not vary dramatically across this range of conditions. The various cases were selected and modeled in such a fashion that this assumption is thought to be correct.

- The LPG in the tank at the Sea-3 facility is 94-98% propane. For purposes of the consequence analysis, the cases were modeled as releases of pure propane. Since the remaining components in the LPG have properties similar to propane, so this approximation will have an insignificant effect on the case results.

- Some of the input to the consequence models regards information which changes slightly throughout the year. That is, seasonal effects have an impact on the weather conditions, ground temperature, and even the operating pressures used to model the cases. The ambient temperature was estimated based on the expected value for a summer day. This is a conservative approximation, since the operating pressures are highest during the summer months. Thus, the results calculated for this study are somewhat conservative for events which occur during other times of the year.

7.0 CONCLUSIONS

This analysis has served to simulate some loss-of-containment scenarios and estimate the associated frequency and consequences, which in combination, represent the risk associated with the facility. The judgement as to what constitutes a tolerable risk is, of course, a very subjective one. The analysis performed here and the results generated serve as a useful tool in arriving at such a judgement.

Several useful means exist for evaluating risk acceptability, including:

- Comparison of risk to the associated *benefits* gained
- Comparison of *cost* of reducing risks against the benefits and disadvantages from accepting them
- Comparison of *alternatives* for achieving the same objective
- Comparison with *unrelated* risks (e.g., other industries)
- Comparison with *natural* or background risk levels (e.g., earthquakes, hurricanes)

With these considerations in mind, the following conclusions are offered:

- Based on the results of this analysis, it is considered that the risk associated with the Sea-3 facility is neither clearly intolerable nor clearly negligible. That is, no cases were identified which posed an inordinate amount of risk to residents in the nearby community. However, neither are the risks so low as to be considered trivial. As with all chemical or petroleum facilities, a certain amount of risk exists. Of course, a facility with zero-risk is unachievable; the goal is to control the hazards in such a manner that the risk is considered to be As Low As Reasonably Practicable (ALARP).

- ***The incremental increase in risk associated with the addition of the new LPG tank appears to be minimal. The reason for this is that no new hazards are being introduced to the facility. No new chemicals or new equipment types are being added. Furthermore, the volume of the additional tank is less than that of the existing tank. Thus, the consequences of the worst-case accident will not increase. Moreover, when considering the level of existing risk (which must also include the risk posed by other industrial facilities in the area), it is considered that the presence of a second LPG tank in the Sea-3 facility will not perceptibly increase the risk to individuals in the local community.***

- Of the cases modeled, the greatest risk appears to be that associated with the expansion joint failures. The predicted likelihood of such a failure is somewhat higher than associated with, for example, a pump discharge line rupture, while the associated consequence are also higher. Thus, if measures for risk mitigation are to be adopted, they should be directed in the first instance at these events.

- A number of safety features are planned at the Sea-3 facility to mitigate a loss-of-containment if it were to occur. Two features in particular are a sub-impounding basin and a water spray mitigation system. The sub-impounding basin will help to contain spilled liquid, thereby reducing both pool fire effects and also the vapor dispersion resulting from evaporation of the liquid pool. A high-intensity water spray directed at a released vapor cloud will help to entrain air and cause dispersion of the cloud thereby reducing concentrations and hence the resulting hazard zone. A second benefit of the water spray is that it can be used to cool tanks and other equipment when necessary.

  The consequence models indicated that for the cases considered in this study, there are two mechanisms by which LPG vapor results. The first is the initial, vapor *flash* upon release. That is, when the propane goes from its operating temperature and pressure to ambient temperature and atmospheric pressure, a certain percentage of the propane immediately vaporizes. Some of the propane that does not flash immediately remains suspended in the cloud while the rest falls to the ground and forms a liquid pool. The second mechanism for generating propane vapor is evaporation from the liquid pool.

  In all cases, the consequence models indicated that the more important mechanism for vapor generation is the initial flash. That is, the resulting hazard zones are primarily due to the amount of vapor that is generated immediately upon release; by comparison, the hazard posed by pool evaporation is much less important.

  This leads to the conclusion that the water spray mitigation (away from the area of the sub-impounding basin) is the more critical event reduction measure, and should be seen as the first line of defense. While the sub-impounding basin is a very useful safety feature for reducing the hazard posed by a liquid pool, its benefit will be most evident when the water spray system can succeed in reducing the concentration in the cloud produced by the initial flash.

- In reviewing the intermediate results of the consequence models, the benefits of refrigerated LPG versus pressurized LPG are evident. For example, for the case of an instantaneous release of refrigerated propane, fully 93.6% of the mass in the tank "rains out", i.e., falls to the ground and forms a liquid pool. That is,

less than 4% of the mass in the tank participates in the initial flash to the vapor state, whereas with pressurized LPG, the flash fraction would be much higher, approaching 100% depending upon the temperature in the tank. Since the size of the cloud footprint is a function of the mass in the vapor cloud, full refrigeration of the tank *significantly reduces* the size of the cloud footprint and therefore the associated hazard.

8.0 SUMMARY

Fluor Daniel, Inc. has been requested by Sea-3, Inc. to conduct a hazard modeling study in support of its application to install a second refrigerated tank at its terminal site in Newington, New Hampshire. The analysis, which is being required by the Newington Planning Board, utilizes a standard technical approach and state-of-the-art computer software to model hypothetical propane release cases and evaluate their associated risk.

Risk, by definition, is a measure of loss expressed in terms of both the magnitude and likelihood of the expected damage. Accordingly, the hazard modeling study included an analysis of the consequences of potential releases as well as the probability that such releases will actually occur. The analysis was based on a total of five simulated events, as identified by a Process Hazards Analysis (PHA) study, performed in accordance with Occupational Safety and Health Administration (OSHA) regulations by Sea-3 and LGA Engineering.

The Newington Planning Board requested the development of a worst-case scenario whereby the proposed tank would hypothetically rupture by some extreme means and its full capacity released. No data were found for this case, i.e., no instances were identified where a tank of similar construction and in similar service suffered this type of accident anywhere in the world. Failure rates for *pressurized* tanks have a failure rate in the range of one in ten thousand years (1 / 10,000 years) to one in one million years (1 / 1,000,000 years). It is likely that the failure rate for this *refrigerated* tank would be one to two orders of magnitude less frequent than this, i.e., one in one hundred thousand years (1 / 100,000 years) to one in one hundred million (1 / 100,000,000 years).

The results of the study were presented in terms of hazard distance and event likelihood. A summary of the vapor dispersion distance and initiating event frequencies is presented in Table 6.

Based on the results of the study, it is considered that no drastic measures or major additional capital expenditures for risk mitigation are warranted. Moreover, when considering the level of background risk due to existing facilities in the area, it is considered that the proposed addition of the new tank and associated equipment does not appreciably impact the overall risk levels currently present in the area.

Table 6 Summary of Results

Case #	Case Description	Dispersion Distance to LFL* (ft)	Initiating Event Frequency (/year)
1	Failure of a pump seal on one of the cold product pumps	72	1
2	Failure of the 2" line on the cold pump discharge piping	233	1 / 3846
3	Failure in the 12" expansion joint on the suction side of the cold product pumps	640	1 / 385
4	Failure in the expansion joint in the area of the 16" fill line on the LPG tank	955	1 / 385
5	Instantaneous release of entire tank inventory	7746	Reference page 27 paragraph 3

* Lower Flammable Limit concentration (see page 15)

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SERVICE DATE – MARCH 17, 2015

SURFACE TRANSPORTATION BOARD

DECISION

Docket No. FD 35853

SEA-3, INC.—PETITION FOR DECLARATORY ORDER

Digest:[1] SEA-3, Inc. (SEA-3), a non-carrier, asks the Board to find that appeals by the City of Portsmouth, N.H., of a zoning decision—which approved SEA-3's construction of additional rail berths at the liquefied petroleum gas transload facility it owns and operates in the Town of Newington, N.H.—are preempted by federal law. The Board provides guidance on the issue but denies the petition for declaratory order because the law about the extent to which 49 U.S.C. § 10501(b) preemption applies to transload facilities is clear.

Decided: March 16, 2015

By petition filed on August 4, 2014, SEA-3, Inc. (SEA-3), seeks a declaratory order holding that all claims made by the City of Portsmouth, N.H. (the City or Portsmouth), in certain zoning litigation are preempted by 49 U.S.C. § 10501(b).[2] SEA-3 states that Portsmouth has appealed zoning decisions that approved SEA-3's plan to construct five additional rail berths at the liquefied petroleum gas (LPG or propane) transload facility it owns and operates on land it leases in the Town of Newington, N.H. (Newington). Portsmouth, in a reply filed on August 20, 2014, asks the Board to dismiss the petition for lack of standing or, in the alternative, to deny the petition and find that the City's appeals do not involve regulation of transportation by rail carrier or preclearance requirements that are federally preempted. On September 30, 2014, Boston and Maine Corporation and Springfield Terminal Railway Company d/b/a Pan Am Railways (Pan Am), the rail carrier serving the transload facility, filed comments in support of SEA-3's petition.[3] On January 20, 2015, Norfolk Southern Railway Company (NS) submitted comments

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[1] The digest constitutes no part of the decision of the Board, but has been prepared for the convenience of the reader. It may not be cited to or relied upon as precedent. Policy Statement on Plain Language Digests in Decisions, EP 696 (STB served Sept. 2, 2010).

[2] SEA-3 Pet. 20.

[3] In a decision served on August 29, 2014, the Board granted Pan Am's request for leave to intervene and for a two-week extension to file substantive comments. Pan Am subsequently notified the Board that the parties were engaged in discussions to resolve the issues and requested a further extension to September 30, 2014. The Board granted that extension request in a decision served on September 5, 2014. Pan Am filed its comments on September 30, 2014, after negotiations proved unsuccessful.

as amicus curiae in support of SEA-3's petition. On February 10, 2015, the Propane Gas Association of New England (PGANE) also submitted comments as amicus curiae in support of SEA-3's petition. On February 12, 2015, CSX Transportation, Inc. (CSXT) submitted a petition to intervene and comments in support of SEA-3's petition.[4]

For the reasons discussed below, SEA-3's petition for a declaratory order will be denied.

BACKGROUND

SEA-3 states that Pan Am's Newington Branch is the only rail line serving the transload facility, which is one of only two propane storage and distribution terminals in New England and the only one with rail access. The facility, according to SEA-3, has been in continuous operation since 1975 and has a storage capacity of 560,000 barrels. While the majority of the propane delivered to the facility historically moved from overseas sources by ship, SEA-3 states that the facility has three rail berths that allow it to offload six rail cars of domestically produced propane per day. SEA-3 seeks to reconfigure and expand the facility by constructing five additional rail berths on land leased from Pan Am. SEA-3 claims that this is necessary because recent market changes have made the cost of overseas-produced propane prohibitively expensive. Asserting that the expansion project would allow it to satisfy the majority of its propane requirements from domestic sources, SEA-3 contends that the additional rail berths are essential if it is to continue supplying the New England market with propane.

According to SEA-3, the Newington Planning Board (Planning Board) approved SEA-3's application to expand the facility on May 19, 2014, and on June 16, 2014, Portsmouth filed an appeal with the Newington Zoning Board of Adjustment (NZBA). Also on June 16, 2014, according to SEA-3, Portsmouth filed with the New Hampshire Superior Court (Court) a petition to overturn the Planning Board's decision, or in the alternative to require a study of the rail effects of the expansion project.[5] SEA-3 contends that Portsmouth has been opposed to the expansion project since it received notice of the application from the Planning Board, and that Portsmouth's sole objective is to block additional LPG rail car traffic from moving through the City.

SEA-3 argues that any attempts by localities or states to direct rail traffic or impose preclearance requirements on transload facilities are federally preempted under § 10501(b). Section 10501(b), as broadened by the ICC Termination Act of 1995, Pub. L. No. 104-88, 109 Stat. 803, expressly provides that the jurisdiction of the Board over "transportation by rail carriers" is "exclusive." 49 U.S.C. § 10501(b). Section 10501(b) also explicitly states that "the

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[4] Pan Am, NS, PGANE, and CSXT will be referred to as "Petition Supporters."

[5] City of Portsmouth v. Newington Planning Bd., Rockingham County Superior Court Docket No. 218-2014-CV00654. Under New Hampshire law, according to SEA-3, any appeal of a zoning decision by a town's Planning Board must first be resolved by the town's Zoning Board of Adjustment (ZBA). SEA-3 states that when dual appeals are filed, as in this case, court action is stayed pending a ZBA decision, and if the ZBA decision is appealed, the two appeals are consolidated in the court.

remedies provided under [49 U.S.C. §§ 10101-11908] with respect to regulation of rail transportation are exclusive and preempt the remedies provided under Federal or State law." SEA-3 asks the Board to find that the claims Portsmouth has made to the NZBA and the Court, including any claims that are derived from, or depend on, allegations that Portsmouth would be adversely affected as a result of increased rail transportation, are preempted.

Portsmouth requests that the proceeding be dismissed for lack of standing, contending that SEA-3 is not a rail carrier; that SEA-3 built, owns, controls, insures, and advertises the facility; and that SEA-3 is the sole applicant for approval of, and is solely responsible for all of the costs of the instant expansion project. In the alternative, Portsmouth requests that the Board find the City's appeals, which include a request for a safety/hazard study of the SEA-3 expansion site, are not federally preempted preclearance requirements. Portsmouth denies: (1) that it is seeking a safety study of Pan Am's rail operations, as opposed to a study of the SEA-3 expansion site; (2) that it is seeking to deprive SEA-3 of its right to receive rail services; and (3) that it is using local site plan review regulations and zoning ordinances to regulate rail transportation.

Portsmouth contends that there is no conflict between its request for a safety/hazard study of the planned expansion of the facility and SEA-3's use of Pan Am for common carrier rail service. In appealing and filing for court review of the Planning Board's decision approving the expansion project, Portsmouth contends it "is simply asking Newington to comply with its site review regulations and zoning ordinances as they apply to the site itself, not the rails . . . in order to assess whether the project promotes the health[,] safety and welfare of the residents of Newington and [the] other affected communities."[6] Noting that similar studies were performed the last time SEA-3 expanded its facility in 1996, Portsmouth asserts that, in its zoning appeals, it merely seeks the ability to review and comment on a safety/hazard assessment, claiming that this "would not subject SEA-3 to an unreasonable delay and is not unreasonably burdensome, nor does it discriminate against railroads."[7]

Pan Am argues that Portsmouth's appeals to the NZBA and the Court are preempted by § 10501(b) because they would not have been filed absent a potential increase in rail traffic. Pan Am contends that Portsmouth, notwithstanding its denials, is in fact attempting to regulate rail transportation by Pan Am through litigation that would frustrate and delay increased rail service to SEA-3's transload facility. Pan Am also claims that Portsmouth remains adamantly opposed to the expansion project, even though Pan Am has provided substantial information to the community throughout the Planning Board's process, attended all Planning Board meetings, met with representatives of Portsmouth and surrounding communities on several occasions, and solicited input from the Federal Railroad Administration (FRA) and the New Hampshire Department of Transportation (NHDOT). Further, Pan Am states that during this community outreach it has pointed out that rail service on the Portsmouth and Newington Branches has continued for decades with at least four active customers now being served in Newington; that the only change in operations that would result from the expansion project would be an increase in rail service from two to potentially six days a week; and that FRA, NHDOT, and emergency

[6] Portsmouth Reply 10-11.

[7] Id. at 16.

responders "have reviewed the potential impact of an increase in rail service [and have] informed the Planning Board, Portsmouth, and other neighboring municipalities that no significant safety concerns exist."[8] Finally, Pan Am asserts that it has already begun work to upgrade the Portsmouth and Newington Branches from marginal FRA Class 1 to FRA Class 2 standards and that this work should be completed in the summer of 2015.

NS, in its amicus filing, states that it has an interest in this case because SEA-3 is its customer. NS argues that Portsmouth is attempting to regulate rail commerce and that therefore Portsmouth's position in this case is contrary to the Board's preemption precedent. NS also raises concerns that Portsmouth's "attempts to regulate the flow of commerce"[9] are part of a trend of localities enacting regulations that are preempted under § 10501. Similarly, PGANE argues that Portsmouth is seeking to interfere with the flow of interstate commerce by rail, and Portsmouth's actions would lead to a patchwork of conflicting local regulations over rail operations. CSXT, in its comments, asserts that Portsmouth is attempting to regulate the use of a railroad line through the zoning process, which is one of the most invasive forms of regulation and is clearly preempted under § 10501(b).

DISCUSSION AND CONCLUSIONS

The Board has discretionary authority under 5 U.S.C. § 554(e) and 49 U.S.C. § 721 to issue a declaratory order to eliminate controversy or remove uncertainty in a matter related to the Board's subject matter jurisdiction.[10] Where the law is clear, the Board may decline to institute a proceeding and instead provide guidance on the preemption issue presented, and it is appropriate to do so here. See, e.g., 14500 Ltd.—Pet. for Declaratory Order, FD 35788, slip op. at 2 (STB served June 5, 2014).[11]

The Interstate Commerce Act (Act) is "among the most pervasive and comprehensive of federal regulatory schemes." Chi. & N.W. Transp. Co. v. Kalo Brick & Tile Co., 450 U.S. 311, 318 (1981). The federal preemption provision contained in § 10501(b) bars the application of most state and local laws to railroad operations that are subject to the Board's jurisdiction.[12]

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[8] Id. at 5-6.

[9] NS Comments 1.

[10] See, e.g., Bos. & Me. Corp. v. Town of Ayer, 330 F.3d 12, 14 n.2 (1st Cir. 2003); Delegation of Auth.—Declaratory Order Proceedings, 5 I.C.C. 2d 675, 675 (1989).

[11] We also note that, according to Pan Am, the NZBA held a hearing on September 15, 2014, and denied all of Portsmouth's claims. Pan Am Reply 3 n.1 & Ex. A. Thus, it appears that SEA-3 has prevailed at every stage of the zoning process to date.

[12] State or local permitting or preclearance requirements, including building permits, zoning ordinances, and environmental and land use permitting requirements, are categorically preempted as to any facilities that are an integral part of rail transportation. See Green Mountain R.R. v. Vermont, 404 F.3d 638, 643 (2d Cir. 2005). Other state actions may be preempted as applied—that is, only if they would have the effect of unreasonably burdening or interfering with rail transportation. See N.Y. Susquehanna & W. Ry. v. Jackson, 500 F.3d 238, 252 (3d Cir.

(continued . . .)

Because the Board has jurisdiction over "transportation by rail carrier," 49 U.S.C. § 10501(a), to be subject to the Board's jurisdiction and qualify for federal preemption under 49 U.S.C. § 10501(b), the activities at issue must be "transportation" and must be performed by, or under the auspices of, a "rail carrier." The statute defines "transportation" expansively to encompass any property, facility, structure or equipment of any kind related to the movement of passengers or property, or both, by rail, and services related to that movement, including receipt, delivery, transfer in transit, storage, and handling of property. 49 U.S.C. § 10102(9). Moreover, "railroad" is defined broadly to include a switch, spur, track, terminal, terminal facility, freight depot, yard, and ground, used or necessary for transportation. 49 U.S.C. § 10102(6). Whether a particular activity is considered part of transportation by rail carrier under § 10501 is a case-by-case, fact-specific determination. See, e.g., Diana Del Grosso.—Pet. for Declaratory Order, FD 35652, slip op. at 5 (STB served Dec. 5, 2014).

The Board's jurisdiction extends to rail-related activities that take place at transloading facilities if the activities are performed by a rail carrier, the rail carrier holds out its own service through a third party that acts as the rail carrier's agent, or the rail carrier exerts control over the third party's operations.[13] The record presented to the Board in this case, however, does not demonstrate that SEA-3 is a carrier or that it is performing transportation-related activities on behalf of Pan Am or any other rail carrier at the transload facility.

(. . . continued)
2007); Joint Pet. for Declaratory Order—Bos. & Me. Corp. & Town of Ayer (Ayer), 5 S.T.B. 500, 507-508 (2001), reconsideration denied (STB served Oct. 5, 2001). Even where § 10501(b) preemption applies, there are limits to its scope. Overlapping federal statutes are to be harmonized, with each statute given effect to the extent possible. Moreover, states retain police powers to protect the public health and safety on railroad property so long as state and local regulation do not unreasonably interfere with interstate commerce. Green Mountain, 404 F.3d at 643.

[13] Id. Compare Green Mountain, 404 F.3d at 642 (transloading and temporary storage of bulk salt, cement, and non-bulk foods by a rail carrier qualified for preemption); Lone Star Steel Co. v. McGee, 380 F.2d 640, 647 (5th Cir. 1967), and Ass'n of P&C Dock Longshoremen v. Pittsburgh & Conneaut Dock Co., 8 I.C.C. 2d 280, 290-95 (1992) (an agent undertaking the obligations of a common carrier (i.e., performing services as part of the total rail service contracted for by a member of the public) also holds itself out to the public as being a common carrier by rail, and is therefore subject to federal regulation), with Town of Milford, Mass.—Pet. for Declaratory Order, FD 34444, slip op. at 3-4 (STB served Aug. 12, 2004) (Board lacked jurisdiction over noncarrier operating a rail yard where it transloaded steel pursuant to an agreement with the rail carrier, but the transloading services were not being offered as part of common carrier services offered to the public); High Tech Trans, LLC—Pet. for Declaratory Order—Newark, N.J., FD 34192 (Sub-No. 1), slip op. at 7 (STB served Aug. 14, 2003) (no STB jurisdiction over truck-to-truck transloading prior to commodities being delivered to rail); and Town of Babylon & Pinelawn Cemetery—Pet. for Declaratory Order, FD 35057, slip op. at 5 (STB served Feb. 1, 2008) (Board lacked jurisdiction over activities of a noncarrier transloader offering its own services directly to customers).

Citing Norfolk Southern Railway v. City of Alexandria (Alexandria), 608 F.3d 150 (4th Cir. 2010), and Boston & Maine Corp.—Petition for Declaratory Order (Winchester), FD 35749 (STB served July 19, 2013), SEA-3 argues that any attempt by localities or states to direct rail traffic or impose preclearance requirements on this facility are federally preempted under § 10501(b). SEA-3 and the Petition Supporters further argue that Portsmouth is attempting to use its appeals of the Planning Board's decision to interfere with Pan Am's rail operations and to intrude into matters directly regulated by the Board. Portsmouth's sole objective, Pan Am and PGANE claim, is to prevent an increase in rail service to SEA-3 by blocking additional propane shipments from traveling through the City. Pan Am contends that Portsmouth will use the results of any litigation to impose restrictions on SEA-3's ability to use, and Pan Am's ability to provide, rail transportation. In support of preemption, Pan Am, NS, and CSXT also cite Winchester, which they assert has facts almost identical to those at issue here, and Pan Am and PGANE similarly rely on Ayer.

However, the facts in the cases relied on by SEA-3 and the Petition Supporters are very different from those at issue here. The cited cases involved local regulation of transloading performed by the rail carrier or under its auspices (Alexandria and Ayer), or local regulation of the railroad's ability to conduct common carrier transportation (Winchester). Alexandria involved an ethanol transload facility constructed and owned by Norfolk Southern Railway Company and operated under its auspices. Ayer involved the construction and operation of an automobile unloading facility by Boston and Maine Corp. and Springfield Terminal Railway Co., and their corporate parent, Guilford Transportation Industries, Inc. (now Pan Am). SEA-3 and the Petition Supporters do not allege that SEA-3 is a rail carrier, or that its transloading is performed under the auspices of a rail carrier,[14] as was the case in Alexandria and Ayer.

Winchester involved a local regulation that would have prohibited a rail carrier (Pan Am) from operating trains over the line in question. The Board determined that § 10501(b) preempted this regulation because it prevented the rail carrier from conducting its operations in interstate commerce. Here, SEA-3 and the Petition Supporters have not identified an attempt by Portsmouth to regulate *Pan Am's* operations, as was the case in Winchester.[15] Instead, Portsmouth's litigation challenging the Planning Board's decision involves permitting of the expansion of *SEA-3's* facility, and as noted, it is undisputed that SEA-3 is not a rail carrier or acting under the auspices of a rail carrier.[16] Thus, it appears that the only regulatory action at issue in this case is a local government's participation in zoning litigation over the expansion of a non-carrier facility. Without more, this situation does not reflect undue interference with

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[14] See n.13, supra.

[15] NS is incorrect when it suggests that Winchester addressed a "contested municipal zoning ordinance . . . applied to the shipper facility . . . ." NS Comments 3. As noted above, the municipal ordinance at issue in Winchester would have prohibited *the rail carrier* from operating trains over the line in question. See Bos. & Me. Corp.—Pet. for Declaratory Order, FD 35749, slip op. at 4-5 n.17 (STB served Oct. 31, 2013) (observing that the Winchester decision applied to the rail carrier's operations over the line, not to the shipper facility).

[16] See SEA-3 Pet. 20 (requested declaratory order would find preemption only with respect to "claims made in Portsmouth's Superior Court Petition and ZBA Appeal").

"transportation by rail carriers." See 49 U.S.C. § 10501(b). Accordingly, SEA-3 and the Petition Supporters have not demonstrated on this record that preemption under § 10501(b) applies to Portsmouth's zoning appeals.

If Portsmouth or any other state or local entity were to take actions as part of a proposed safety/hazard study, or otherwise, that interfere unduly with Pan Am's common carrier operations, those actions would be preempted under § 10501(b). See, e.g., Bos. & Me. Corp.—Pet. for Declaratory Order, FD 35749 (STB served Oct. 31, 2013) (confirming that the Town of Winchester's directive prohibiting Pan Am from conducting transportation over a rail line was preempted). As the Board and the courts have explained, Portsmouth may apply non-discriminatory regulations to protect public health and safety, but only provided that its regulations do not have the effect of foreclosing or unduly restricting Pan Am's ability to conduct operations over its Newington and Portsmouth Branches, or otherwise unreasonably burden interstate commerce.[17]

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

It is ordered:

1. SEA-3's petition for declaratory order is denied, and this proceeding is discontinued.

2. This decision is effective on the date of service.

By the Board, Acting Chairman Miller and Vice Chairman Begeman.

[17] As discussed above, state and local regulation is not preempted where it does not interfere with rail operations. Localities retain their reserved police powers to protect the public health and safety so long as their actions do not unreasonably burden interstate commerce. See Green Mountain, 404 F.3d at 643. Electrical, plumbing, and fire codes also are generally applicable. See Green Mountain, 404 F.3d at 643. State and local action, however, must not have the effect of foreclosing or unduly restricting the rail carrier's ability to conduct its operations or otherwise unreasonably burden interstate commerce. See CSX Transp. Inc.—Pet. for Declaratory Order, FD 34662, slip op. at 5 (STB served May 3, 2005).