

Quarterly Report # 4

[For the quarter ending 9/30/2005]

Date of Report: *30 September 2005*

Contract Number: *DTRS56-04-T-0005*

Prepared for: *U.S.DOT, Research & Special Programs Administration,
Distrigas of Massachusetts Corporation*

Project Title: *“Modeling and Assessing a Spectrum of Accidental Fires
and Risks in a LNG Facility”*

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For quarter end period *30 September 2005*

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In this quarter (# 4) the focus of work was on the following items:

- 1 The (further) modeling and description of radiative characteristics of large turbulent, diffusion LNG pool fires and the development of a technical paper for submission to a peer reviewed journal..
- 2 Development of the computer codes integrating the fire radiation models developed.

Computer programs that were developed to determine the locations of contours of constant thermal radiation flux levels on the ground from a fire on top of a LNG storage tank have been exercised for sample cases. Coding of the large fire model into a computer program has been completed.; however, the debugging of the code is continuing. . Integration of several different fire sub-models into an overall computerized system will be undertaken in the coming months.

The application of risk protocol to evaluate LNG facility and/or LNG ship release hazards to the public will be undertaken during the next reporting period. Development of a set of recommendations for instituting an approach to modifying Codes/Standards and Regulations on LNG facilities will also be undertaken in the coming months.