

March 26, 2020

Mr. Laurence Hubbard
President
Montana State Fund
855 Front Street
Helena, MT 59601

Dear Mr. Hubbard:

Phase-in of Firefighter Presumption Surcharge – Addendum

This letter and attached exhibits present our analysis of the estimated ultimate loss and allocated loss adjustment expense (ALAE) for the Montana State Fund (MSF) for various prospective policy periods related to the Montana firefighter presumption legislation SB0160.

This final report replaces and supersedes any previously issued draft report(s).

SB0160 states that a firefighter becomes eligible for presumptive disease coverage after a given number of years of employment. The number of years varies by disease, and ranges from four to fifteen years. Employment history after July 1, 2014 is used to calculate tenure. For instance, the ultimate losses associated with diseases with employment requirements of six or fewer years will apply to policy year 2020.

The attached exhibits display the ultimate loss and ALAE estimates, and related indicated rate surcharges, for policy years 2020, 2024, 2026 and 2029. By 2029, all eligibility requirements will be met and the impact of the legislation will be “mature”. The exhibits also show the split of full time firefighters and volunteer firefighters.

This letter is an addendum to the January 24, 2020 “Senate Bill 160 – Firefighter Presumption Analysis: Estimated Loss and Allocated Loss Expense Cost” report. The *Distribution, Background and Reliances and Limitations* sections of that report apply equally to this document.

We note that while we consider the future surcharges to be reasonable based on the current analysis, ultimate losses and ALAE for future policy years are expected to change due to inflation and other factors. All ultimate loss and ALAE amounts in the attached exhibits are presented at policy year 2020 values. The assumption made herein is that the underlying rates upon which the surcharges are based will be adjusted appropriately over time, thus maintaining the appropriateness of the surcharge.

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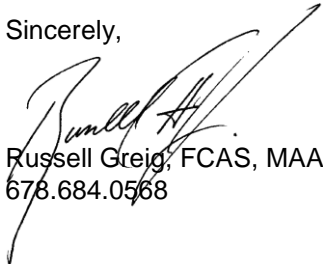
Five Concourse Parkway
Floor 18
Atlanta, GA 30328

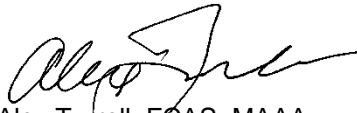
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It has been a pleasure working with you and your staff on this project. We will be available to answer any questions that may arise.

Sincerely,


Russell Greig, FCAS, MAAA, CFA
678.684.0568


Alex Turrell, FCAS, MAAA
860.843.7018

Montana State Fund

Workers Compensation - Firefighter Disease Presumption Study
 Phase in of Surcharge
 Full Time Firefighters
 Central Estimate

Surcharge Phase-in
 Full Time

| Disease Type (1) | Expected Mature Ultimate Loss and ALAE: Full Time Firefighters (2) | Tenure Requirement (years) (3) | Expected Ultimate Loss and ALAE at Policy Year (current cost) | | | |
|--|---|-----------------------------------|---|------------------|------------------|------------------|
| | | | 2020 (4) | 2024 (5) | 2026 (6) | 2029 (7) |
| | | | Bladder Cancer | \$6,492 | 12 | \$0 |
| Brain Cancer | 8,431 | 10 | 0 | 8,431 | 8,431 | 8,431 |
| Breast Cancer | 74 | 5 | 74 | 74 | 74 | 74 |
| Colorectal Cancer | 28,687 | 10 | 0 | 28,687 | 28,687 | 28,687 |
| Esophageal Cancer | 10,854 | 10 | 0 | 10,854 | 10,854 | 10,854 |
| Kidney Cancer | 16,931 | 15 | 0 | 0 | 0 | 16,931 |
| Leukemia | 8,299 | 5 | 8,299 | 8,299 | 8,299 | 8,299 |
| Lung Cancer | 45,535 | 4 | 45,535 | 45,535 | 45,535 | 45,535 |
| Non-Hodgkin's Lymphoma | 13,549 | 15 | 0 | 0 | 0 | 13,549 |
| Mesothelioma | 882 | 10 | 0 | 882 | 882 | 882 |
| Myeloma | 2,505 | 15 | 0 | 0 | 0 | 2,505 |
| Myocardial Infarction (Heart Attack) | 37,971 | 10 | 0 | 37,971 | 37,971 | 37,971 |
| Total | \$180,211 | | \$53,908 | \$140,734 | \$147,226 | \$180,211 |
| (8) Payroll | \$13,349,040 | | \$13,349,040 | \$13,349,040 | \$13,349,040 | \$13,349,040 |
| (9) Rate per \$100 of payroll (discounted) | 1.147 | | 0.343 | 0.896 | 0.937 | 1.147 |
| (10) Surcharge | 0.182 | Phase-in: | 0.055 | 0.142 | 0.149 | 0.182 |

Notes:

- (2) From Sheet 1 of each Exhibit.
- (3) From Montana legislation SB160. Tenure considers employment history since July 1, 2014.
- (4) - (7) (2), if tenure requirement in (3) has been met.
- (8) Provided by MSF.
- (9) Ultimate loss / payroll.
- (10) (9) divided by firefighter class rate of 6.29 provided by Montana State Fund.

Montana State Fund

Workers Compensation - Firefighter Disease Presumption Study
 Phase in of Surcharge
 Volunteer Firefighters
 Central Estimate

Surcharge Phase-in
 Volunteers

| Disease Type (1) | Expected Mature Ultimate Loss and ALAE: Volunteer Firefighters (2) | Tenure Requirement (years) (3) | Expected Ultimate Loss and ALAE at Policy Year (current cost) | | | |
|--|---|---|---|------------------|------------------|------------------|
| | | | 2020 (4) | 2024 (5) | 2026 (6) | 2029 (7) |
| | | | Bladder Cancer | \$14,505 | 12 | \$0 |
| Brain Cancer | 26,325 | 10 | 0 | 26,325 | 26,325 | 26,325 |
| Breast Cancer | 10 | 5 | 10 | 10 | 10 | 10 |
| Colorectal Cancer | 77,000 | 10 | 0 | 77,000 | 77,000 | 77,000 |
| Esophageal Cancer | 32,207 | 10 | 0 | 32,207 | 32,207 | 32,207 |
| Kidney Cancer | 35,127 | 15 | 0 | 0 | 0 | 35,127 |
| Leukemia | 24,485 | 5 | 24,485 | 24,485 | 24,485 | 24,485 |
| Lung Cancer | 133,186 | 4 | 133,186 | 133,186 | 133,186 | 133,186 |
| Non-Hodgkin's Lymphoma | 32,285 | 15 | 0 | 0 | 0 | 32,285 |
| Mesothelioma | 2,123 | 10 | 0 | 2,123 | 2,123 | 2,123 |
| Myeloma | 5,095 | 15 | 0 | 0 | 0 | 5,095 |
| Myocardial Infarction (Heart Attack) | 107,172 | 10 | 0 | 107,172 | 107,172 | 107,172 |
| Total | \$489,519 | | \$157,681 | \$402,508 | \$417,012 | \$489,519 |
| (8) Payroll | \$3,236,795 | | \$3,236,795 | \$3,236,795 | \$3,236,795 | \$3,236,795 |
| (9) Rate per \$100 of payroll (discounted) | 12.855 | | 4.141 | 10.570 | 10.951 | 12.855 |
| (10) Surcharge | 2.044 | Phase-in: | 0.658 | 1.680 | 1.741 | 2.044 |

Notes:

- (2) From Sheet 1 of each Exhibit.
- (3) From Montana legislation SB160. Tenure considers employment history since July 1, 2014.
- (4) - (7) (2), if tenure requirement in (3) has been met.
- (8) Provided by MSF.
- (9) Ultimate loss / payroll.
- (10) (9) divided by firefighter class rate of 6.29 provided by Montana State Fund.