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| **Date:** | January 26, 2018 |
| **Subject:** | Summary of National Retardant Use for 2017 |
| **To:** | Dave Haston, Branch Chief, Equipment and ChemicalsShirley Zylstra, Program Leader, Wildland Fire Chemical SystemsLarry Robillard, Retardant Contracting Officer |

The following tables and charts represent nationwide aerially delivered retardant and water enhancer (gel) use during the 2017 fire season. Table 1 gives the type and amount of retardant pumped at each tanker base over the past year and Table 2 shows the summation. Figures 1 through 4 are charts graphically showing retardant use during the 2017 fire season and over the last 10 years, as well as 10-year averages. This data came from Retardant Use Reports submitted each year by portable base, SEAT base, and airtanker base managers. Values for Phos-Chek 259-Fx are from sales records provided by ICL’s representative Guy Clancy.

The information from these reports is used to monitor retardant use by various state and federal land management agencies as well as to complete Form R’s for the U.S. Environmental Protection Agency’s Toxic Release Inventory (TRI). Due to the nature of the EPA reporting, the Wildland Fire Chemical Systems program typically completes or assists other agencies in completion of these reporting requirements. For the 2016 Fire Season we completed these EPA reports for San Bernardino and Boise. Each of the bases of McClellan and Paso Robles self-reported their seasonal use of ammonia products.

If you have any questions regarding these data, please let me know*.*

#### *Bill Yount*

Bill Yount

Wildland Fire Chemical Systems

Cc: G.Claypool, T.Alexander, J.Kerley, P.Linse, C.Berry, J.Laufmann

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| **CHEMICAL USE AT FS, BLM, AND STATE BASES - 2017 FIRE SEASON** |
|  |  |  |  |
| **BASE** | **RETARDANT** | **GALS. PUMPED** | **# OF LOADS** |
| **Region 1** |   |   |   |
| Broadus SEAT | PC LC-95A-R | 0 | 0 |
| Billings | PC LC-95A-R | 1,201,540 | 471 |
| Coeur d'Alene | PC LC-95A-R | 438,432 | 250 |
| Grangeville SEAT | PC LC-95A-R | 335,384 | 477 |
| Hamilton SEAT | PC LC-95A-R | 11,125 | 19 |
| Helena | PC LC-95A-R | 1,285,102 | 325 |
| Lewistown | PC LC-95A-R | 297,611 | n/r |
| Miles City SEAT | PC LC-95A-R | 412,300 | 589 |
| Missoula | PC MVP-Fx | 1,640,846 | 737 |
| Plains SEAT | PC LC-95A-R | 52,831 | 98 |
| Ronan SEAT | PC LC-95A-R | 537,038 | 898 |
| Ronan SEAT | Fire Ice 561  | 5,158 | 7 |
| West Yellowstone | PC MVP-Fx | 6,460 | 9 |
| Subtotal |   | 6,218,669 | 3,880 |
| **Region 2** |   |   |   |
| Abilene SEAT | PC LC-95A-R | 0 | 0 |
| Amarillo SEAT | PC LC-95A-R | 60,566 | n/r |
| Bartlesville SEAT | PC LC-95A-R | 60,000 | n/r |
| Ardmore Portable | PC LC-95A-R | 17,533 | 6 |
| Fremont County | PC LC-95A-F | 2,190 | 3 |
| Casper SEAT | PC LC-95A-R | 19,850 | 28 |
| Cortez SEAT | PC LC-95A-F | 21,892 | 31 |
| Nebraska SEAT | PC LC-95A-R | 24,055 | 52 |
| Fredricksburg SEAT | PC LC-95A-R | 0 | 0 |
| Durango | PC LC-95A-R | 133,208 | 81 |
| Grand Junction | PC LC-95A-R | 466,312 | 271 |
| Fort Collins | PC P100-F | 5,494 | 8 |
| Hot Springs SEAT | PC LC-95A-R | 26,015 | 48 |
| Jeffco | PC LC-95A-R | 291,366 | 105 |
| Pierre SEAT | PC LC-95A-R | 0 | 0 |
| Pueblo Reload | PC LC-95A-R | 2,111 | 3 |
| Rapid City | PC LC-95A-R | 64,711 | 29 |
| Rifle SEAT | PC LC-95A-F | 29985 | 43 |
| Worland | PC LC-95A-R | 0 | 0 |
| Subtotal |   | 1,225,288 | 708 |
| **Region 3** |   |   |   |
| Alamogordo | PC MVP-Fx | 10,403 | 6 |
| Albuquerque | PC MVP-Fx | 278,372 | 104 |
| Austin SEAT | PC LC-95A-R | 0 | 0 |
| Marana SEAT | PC LC-95A-R | 168,770 | n / r |
| Fort Huachuca | PC MVP-Fx | 1,087,782 | 502 |
| Giddens SEAT | PC LC-95A-R | 0 | 0 |
| Kingman SEAT | PC LC-95A-R | 0 | 0 |
| Prescott | PC LC-95A-R | 575,653 | 298 |
| Phoenix-Gateway | PC LC-95A-R | 1,774,067 | 237 |
| Roswell | PC LC-95A-R | 20,000 | 2 |
| Safford SEAT | PC LC-95A-R | 282,246 | n / r |
| Showlow | PC LC-95A-R | 45,623 | 61 |
| Wickenburg | PC LC-95A-R | 0 | 0 |
| Silver City | PC MVP-F | 9,307 | 13 |
| Winslow | PC LC-95A-R | 58,329 | 24 |
| Subtotal |  | 4,310,552 | 1,247 |
| **Region 4** |   |   |   |
| Battle Mountain  | PC LC-95A-R | 1,255,851 | 1061 |
| Boise | PC LC-95A-R | 383,194 | 175 |
| Cedar City | PC LC-95A-Fx | 578,890 | 346 |
| Fillmore SEAT | PC LC-95A-F | 0 | 0 |
| Hailey SEAT | PC LC-95A-R | 0 | 0 |
| Hill | PC LC-95A-Fx | 466,967 | 257 |
| Jean SEAT | PC LC-95A-Fx | 1,300 | 2 |
| McCall | PC LC-95A-R | 60,401 | n/r |
| Mesquite SEAT | PC LC-95A-Fx | 25,675 | 35 |
| Mt. Home SEAT | PC LC-95A-R | 105,691 | 148 |
| Nephi SEAT | PC LC-95A-Fx | 0 | 0 |
| Panaca/Ely SEAT | PC LC-95A-Fx | 0 | 0 |
| Pocatello | PC LC-95A-R | 1,006,501 | 681 |
| Richfield SEAT | PC LC-95A-F | 0 | 0 |
| Rawlins | PC LC-95A-R | 0 | 0 |
| Reno/Stead | PC LC-95A-R | 2,162,453 | 1259 |
| Riverton | PC LC-95A-R | 19,850 | 28 |
| Tooele Valley SEAT | PC LC-95A-F | 367,000 | 499 |
| Twin Falls | PC LC-95A-R | 1,082,780 | 936 |
| Wells SEAT | PC LC-95A-R | 305,533 | 414 |
| Wendover | PC LC-95A-R | 0 | 0 |
| Winnemucca SEAT | PC LC-95A-R | 520,192 | 734 |
| Subtotal |   | 8,342,278 | 6,575 |
| **Region 5** |   |   |   |
| Castle PAB | PC MVP-Fx | 2,086,773 | n/r |
| Bishop  | PC P100-F | 0 | 0 |
| Brown Field | PC 259-Fx | 18,507 | 7 |
| Chester | PC MVP-Fx | 240,301 | n/r |
| Chico | PC MVP-Fx | 1,300,000 | 0 |
| Columbia | PC MVP-Fx | 450,000 | 455 |
| Fox/Lancaster | PC MVP-Fx | 765,707 | 235 |
| Fresno | PC MVP-Fx | 1,513,830 | n/r |
| Grass Valley | PC MVP-Fx | 500,199 | 510 |
| Hemet | PC MVP-Fx | 632,000 | 500 |
| Hollister | PC MVP-Fx | 390,731 | 354 |
| McClellan MRB | PC MVP-Fx | 4,231,163 | 775 |
| Paso Robles | PC MVP-Fx | 1,000,040 | n/r |
| Porterville | PC MVP-Fx | 1,396,395 | 905 |
| Ramona | PC MVP-Fx | 322,700 | n/r |
| Redding | PC MVP-Fx | 1,621,829 | n/r |
| Rohnerville/Fortuna | PC MVP-Fx | 192,755 | n/r |
| San Bernardino | PC MVP-Fx | 2,096,265 | 698 |
| Santa Maria | PC MVP-Fx | 2,303,264 | 488 |
| Santa Rosa/Sonoma | PC MVP-Fx | 737,603 | n/r |
| Siskiyou | PC LC-95A-R | 48,961 | 22 |
| Ukiah | PC MVP-Fx | 430,000 | 410 |
| Subtotal |   | 22,279,023 | 5,359 |
| **Region 6** |   |   |   |
| Burns SEAT | PC LC-95A-R | 226,065 | n/r |
| John Day SEAT | PC LC-95A-R | 40,000 | 57 |
| Klamath Falls | PC LC-95A-R | 608,177 | 275 |
| LaGrande | PC LC-95A-R | 285,766 | 217 |
| Lakeview SEAT | PC LC-95A-R | 281,213 | 411 |
| McDermitt SEAT | PC LC-95A-R | 89,847 | 124 |
| Minden SEAT | PC LC-95A-R | 0 | 0 |
| Medford | PC LC-95A-R | 611,853 | 291 |
| Omak SEAT | PC LC-95A-R | c / e | c / e |
| Moses Lake | PC LC-95A-R | 1,062,594 | 262 |
| Ontario SEAT | PC LC-95A-R | 186,651 | 263 |
| Paisley SEAT | PC LC-95A-R | 6,585 | 10 |
| Redmond | PC LC-95A-R | 1,689,492 | 691 |
| Subtotal |   | 5,088,243 | 2,601 |
| **Region 8** |   |   |   |
| Fayetteville | PC P100-F ? | 0 | 0 |
| Chattanooga | PC MVP-Fx | 66,213 | 6 |
| Lake City | PC MVP-Fx | 932,527 | 316 |
| Subtotal |   | 998,740 | 322 |
| **Region 9** |   |   |   |
| Bemidji | PC LC-95A-R | 0 | 0 |
| Bemidji | Blazetamer | 6,100 | 10 |
| Bemidji | Fire Ice 561  | 10,300 | 15 |
| Brainerd | PC LC-95A-R | 0 | 0 |
| Brainerd | Fire Ice 561  | 600 | 1 |
| Ely | PC LC-95A-R | 0 | 0 |
| Hibbing | PC LC-95A-R | 0 | 0 |
| Hibbing | Fire Ice 561  | 0 | 0 |
| Princeton SEAT | Fire Ice/Blazetamer | 300 | 3 |
| Warroad | Fire Ice 561  | 6,000 | 8 |
| Subtotal (¥) |   | 0 | 0 |
| **Region 10** |   |   |   |
| Delta Junction | PC LC-95A-R | 0 | 0 |
| Fort Wainwright | PC LC-95A-R | c/e |   |
| Kenai | PC LC-95A-R | 0 | 0 |
| McGrath | PC LC-95A-R | 15,647 | 8 |
| Palmer | PC LC-95A-R | 14,270 | 8 |
| Tanacross | PC LC-95A-R | 42,000 | 21 |
| Subtotal |   | 71,917 | 37 |

**Table 2**

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| **CHEMICAL USE AT FS, BLM, AND STATE BASES - 2017 FIRE SEASON** |
|  |  |  |  |
| **TOTALS** |   | **GALS. PUMPED** | **# OF LOADS** |
| **Fixed-Wing Bases** |  |   |   |
| Retardants only |  | 48,534,710 | 20,729 |
| Gels only |  | 28,458 | 31 |
| **Portable Bases (MRB)** |  |   |   |
| Fixed Wing |  |   |   |
| Rotor (259 Products) |  |   |   |
|   |   |   |   |
| **All Bases/All Products** |   | **48,563,168** | **20,760** |
|  |   |  |  |
| **RESULTS BY REGION** |   |   |   |
| **Retardant** |   |   |   |
| R-1 |   | 6,218,669 | 3,880 |
| R-2 |   | 1,225,288 | 708 |
| R-3 |   | 4,310,552 | 1,247 |
| R-4 |   | 8,342,278 | 6,575 |
| R-5 |   | 22,279,023 | 5,359 |
| R-6 |   | 5,088,243 | 2,601 |
| R-8 |   | 998,740 | 322 |
| R-9 |   | 0 | 0 |
| R-10 |   | 71,917 | 37 |
|   |   | **48,534,710** | **20,729** |
| **Gels** |   |  |  |
| R-1 |   | 5,158 | 7 |
| R-2 |   | 0 | 0 |
| R-3 |   | 0 | 0 |
| R-4 |   | 0 | 0 |
| R-5 |   | 0 | 0 |
| R-6 |   | 0 | 0 |
| R-8 |   | 0 | 0 |
| R-9 |  | 23,300 | 24 |
| R-10 |  | 0 | 0 |
|   |   | **28,458** | **31** |
|   |   |  |  |
|  |  |  |   |
| PRODUCT | Region **Bases** | Portable **(MRB)** |   |
| PC MVP-F | 9,307 |   |   |
| PC P100-F | 5,494 |   |   |
| PC LC-95A-R | 20,773,345 | 511,347 |   |
| PC LC-95A-Fx | 1,072,832 |   |   |
| PC LC-95A-F | 421,067 |   |   |
| PC 259-F | 0 |   |   |
| PC 259-Fx | 18,507 | 4,380,505 |   |
| PC MVP-Fx | 26,234,158 | 3,916,695 |   |
|   |   |   |   |
| Phos-Chek Retardant | 48,534,710 |   |   |
| Gel | 28,458 |  |   |
| Powder | 26,267,466 |   |  |
| Liquid Concentrate | 22,267,244 |   |   |
| SUM | 48,563,168 | 8,808,547 |   |
|  |  |  |  |
| Total **Retardant\*** |  | 57,343,257 |  |
| **\***Includes portables (no gels) |  |  |  |
|  |  |  |  |
|  |  |  |  |