## 2021 Well Violations Summary

Of the total 8,663 violations issued in 2021, 2,765 were administrative violations and 5,898 were environmental health and safety violations.

Of the 2,765 administrative violations, 49 were not documented to specific conventional or unconventional wells, while 2,539 were documented to conventional wells and 177 were documented to unconventional wells. The highest incident rates of these categories of violations are characterized as follows:

- Of the 49 administrative violations that were not documented to a specific conventional or unconventional well, 20 were for failure to submit notice of termination (NOT) after site restoration; 9 were for failure to have E&S plan, inspection reports and monitoring records available at project site during all stages of earth disturbances; 5 were for failure to submit annual production report. The remaining violations were distributed among 11 other violation categories.
- Of the 2,539 administrative violations documented to conventional wells, 542 were for failure to submit an annual production report; 537 were for failure to submit an annual mechanical integrity report; 530 were for failure to install a permanent permit number on a completed well; 470 were for failure to post operator contact information during the preparation and operation of a well. The remaining violations were distributed among 27 other violation categories.
- The 177 administrative violations documented to unconventional wells; 60 were in the category
  for failure to submit a completion report or well record; 33 were for failure to comply with
  terms and conditions of permit; 24 were for failure to submit annual mechanical integrity
  reports. The remaining violations were distributed among 21 other violation categories.

Of the 5,898 environmental health and safety violations, 2,777 were not documented to a specific conventional or unconventional well, while 1,975 were documented to conventional wells and 1,146 were documented to unconventional wells. The highest incident rates of these categories of violations are characterized as follows:

- Of the 2,777 environmental health and safety violations that were not documented to a specific conventional or unconventional well, 1,191 were for failure to comply with terms and conditions of an Erosion and Sedimentation Control General Permit categories; 223 were for failure to install, maintain, repair or remove oil and gas gathering pipelines as required by state laws; 223 were for failure to temporarily stabilize a well site; 221 were for failure to permanently stabilize a well site; 136 were failure to plan and implement the minimization of earth disturbance activities; 124 were for conducting an regulated activity without a permit or contrary to an issued permit. The remaining violations were distributed among 73 other violation categories.
- Of the 1,975 health and safety violations that were documented to conventional wells, 696 were
  for failure to plug the well upon abandoning it; 182 were for managing residual waste without a
  permit or in a manner that was unauthorized by state law; 134 were failure of general provisions

for well construction and operation. The remaining health and safety violations were distributed among 75 other violation categories.

• The 1,146 health and safety violations documented to unconventional wells, 195 failed to report and/or correct the improper cementing of a well within prescribed timeframes or submit a plan to correct the defect within prescribed timeframes; 100 were for failure to obtain a permit before operating a residual waste processing or disposal facility; 96 were for failure to prevent gas flow in the annulus during casing and cementing; 83 were for conducting a regulated activity without a permit or contrary to an issued permit; 66 were for failure to prevent the migration of gas or other fluids into sources of fresh groundwater during casing and cementing; 66 were failure to prevent gas, oil, brine completion/servicing fluids or other materials from below the casing seat from entering fresh groundwater, and prevent pollution or diminution of fresh groundwater; 57 were fore failure to contain regulated substances or waste within a containment or storage structure. The remaining health and safety violations were distributed among 74 other violation categories