

### Development of Projection Data

In order to determine the best employment data to be used when projecting the 2008 actual annual point source emission inventory, a phone call was placed to the Utah Governor's Office of Planning and Budget (GOPB). In a phone conversation with Peter Donner of the GOPB on 4/27/2011, he indicated that current employment data from the Bureau of Economic Analysis (BEA) is considered to be better than current GOPB employment data. The reason for this is that the BEA has taken into account the economic downturn that occurred in late 2008 while the current GOPB employment data has not yet been revised to take this into account. As of 4/27/2011 the BEA employment data included years up to and through 2009. However, data for 2010 was also necessary for performing projections. This situation was also discussed with Peter Donner. He indicated that GOPB still considers the GOPB projection data from 2020 forward to be good data. Therefore it was determined that DAQ would use BEA employment data up to 2009 and then GOPB employment data from 2020 forward. In order to develop data for the years between 2009 and 2020 it was agreed that a straight line analysis would be the best method. Therefore, data for the years between 2009 and 2020 were determined by performing a straight line analysis between the two sets of data.

It should also be noted that BEA did not provide current employment data for every category in the point source emission inventory. In the few cases where this occurred, it was determined that GOPB employment data would be used.

### Development of Episode Inventories

Inventories for each episode was developed by projecting the 2008 actual annual point source emission inventory using the BEA and GOPB employment data mentioned above. In cases where sources reported changes in production during any of the episodes, those changes were used in place of projected values. For example if a source reported an average increase of 10% in production when compared to the 2008 inventory for the 2009 episode, the 2008 inventory data for that source was increased by 10% and used for the 2009 episode. Once the projections and production adjustments were made, any reported breakdown/excess emissions were then added accordingly.

Since the December 8, 2009 – January 21, 2010 episode crossed from one year to the next, it was decided that an averaged 2009 and 2010 inventory would be used for this episode. This projected 2009 and 2010 inventories were added together and divided by two to produce an average inventory. In cases where sources reported changes in production during any of the episodes, those changes were used in place of projected values. Once the projections and production adjustments were made, any reported breakdown/excess emissions were then added accordingly. This averaged and adjusted inventory was then used for both 2009 and 2010 for the December 8, 2009 – January 21, 2010 episode.