

**2010 Rock Island Operational Plan**  
**for Total Dissolved Gas During Fish Spill Season**

**April 1 – August 31**

**(All spill between these dates is subject to the actions contained in this plan.)**

**Protocol**

1. If tailrace TDG average is greater than ***120% for the 6-hour average***
  - monitor for 2 hours, re-check 6-hour average
  - if TDG >120% for 6-hr average, shift spill from gate 20 to 27
  - monitor for 2 hours, re-check 6-hour average
  - if TDG >120% for 6-hr average, open gate 20 and close 2 notched gates (closure order is listed below)
  - monitor for 2 hrs; re-check 6-hour average
  - if TDG >120% for 6-hr average, close two more notched gates
  - **if after closing gates to control TDG levels, the TDG 1-hr average drops below 118%, re-open notched gates in the reverse order of closure\*\***
  
2. If tailrace TDG is greater than ***125% for 1 hr***
  - follow protocol outlined above, but instead, use **one-hour TDG levels of 125%** as the metric
  - continue until TDG is less than 125% for 1 hr and until the 6-hr average TDG <120%
  
3. If forebay TDG exceeds 115% for greater than one hour, call Rocky Reach and advise that the RI forebay is out of compliance. Rocky Reach will then reduce spill, but only if the RR forebay TDG is 115% or less. Once RI forebay TDG levels reduce to 113% call RR again so that they may return to previous spill operations.
  
4. Order of notched gate closure: **29, 24, 18, 16**  
If we have to close any more gates than this, we have a big problem that we will need to be addressed by means other than continuing to reduce spill.

**\*\* Note:** It will not be necessary to monitor for one full hour after re-opening if it appears that TDG is approaching the upper threshold again, rather, the procedure will repeat upon reaching the threshold. It is anticipated that in time, the operators will “get a feel” for how much change in TDG will occur as a result of opening or closing gates and it will be possible to hold the TDG around 118% or 119% or so. Once the operators have this down, instead of closing a gate entirely, it may only be necessary to close partially, and visa versa for the opening process.