ABSTRACT

Case histories of unintended damages to a number of vital pieces of chemical process/petroleum refining equipment will be highlighted. In each case, ineffective management of change (MOC) or the absence of MOC was a key root cause. This presentation is an awareness effort covering a review of a several significant incidents sprinkled with a potpourri mixture of mini modification miseries. In each case, well-meaning / intelligent individuals offered changes that were not properly reviewed. And the creator or sponsor of these mis-handled changes will never forget the subsequent impacts. We must learn from the mistakes of others and you must embrace your Management of Change procedures with enthusiasm. The paper will address various scenarios which include a vessel failure, a furnace tube rupture, chemical spills, accidental fires and explosions. These incidents were the result of design flaws, maintenance errors and safety cultural deficiencies. All lacked an effective review of the changes. A recent poll of MOC compliance and some of the common shortcomings of MOC programs will also be covered.