

Process Safety Initiative - Phase 2 Status Report

April 9, 2020

Good afternoon:

We thought it would be beneficial to provide an interim update as to what trends we have been seeing to this point in our review of the Phase 2 submissions. We hope that WPAC will continue to support its members as this process evolves. Please view this email as a pulse check for your members and distribute it as you see fit.

Generally, we have seen the selection of controls to be valid and appropriate. That being said there have been a few circumstances where the designation of “critical control” status is not supported by the definition of an effective critical control. To that end we have provided a decision path diagram that may help.

Broadly speaking, we’re finding that all of the submissions we have reviewed to date have lacked the specific detail in regards to the critical controls information we need to determine their effectiveness and reliability. For most of the critical controls we have reviewed we have had to ask for clarification as to the same 10 questions:

1. Please briefly describe how the system works in relation to the <XXX machine>.
2. How is the system triggered?
3. Where are the sensors or devices located in relation to the <XXX machine>
4. What are the set points for the sensors or devices?
5. Is there an automated shut down associated with this control? Please describe.
6. How often are the sensors or devices inspected?
7. What is inspected? To what criteria?
8. How are the sensors or devices tested or calibrated? How often?
9. How are the inspections and/or tests documented? Please describe the reporting process for this critical control.
10. What happens if a sensor or device fails an inspection or test? Will a shutdown of the equipment occur until the sensor is repaired or replaced?

It is this detailed information that is contained on page 1 of the Quick Tips document we provided each location.

In addition, we’ve found that in most circumstances, the Bowties have been completed for various pieces of equipment within the production process, however the connecting equipment such as

conveyors, buckets elevators, etc. have not been included in the analysis. This equipment also contains a risk of fire and explosion and needs to be included in some fashion.

We've seen some circumstances where it appears that the same Bowtie was developed for multiple process areas. Please ensure that each Bowtie is unique to a single part of the process and the top event listed. This is not intended to be a "cut and paste" situation.

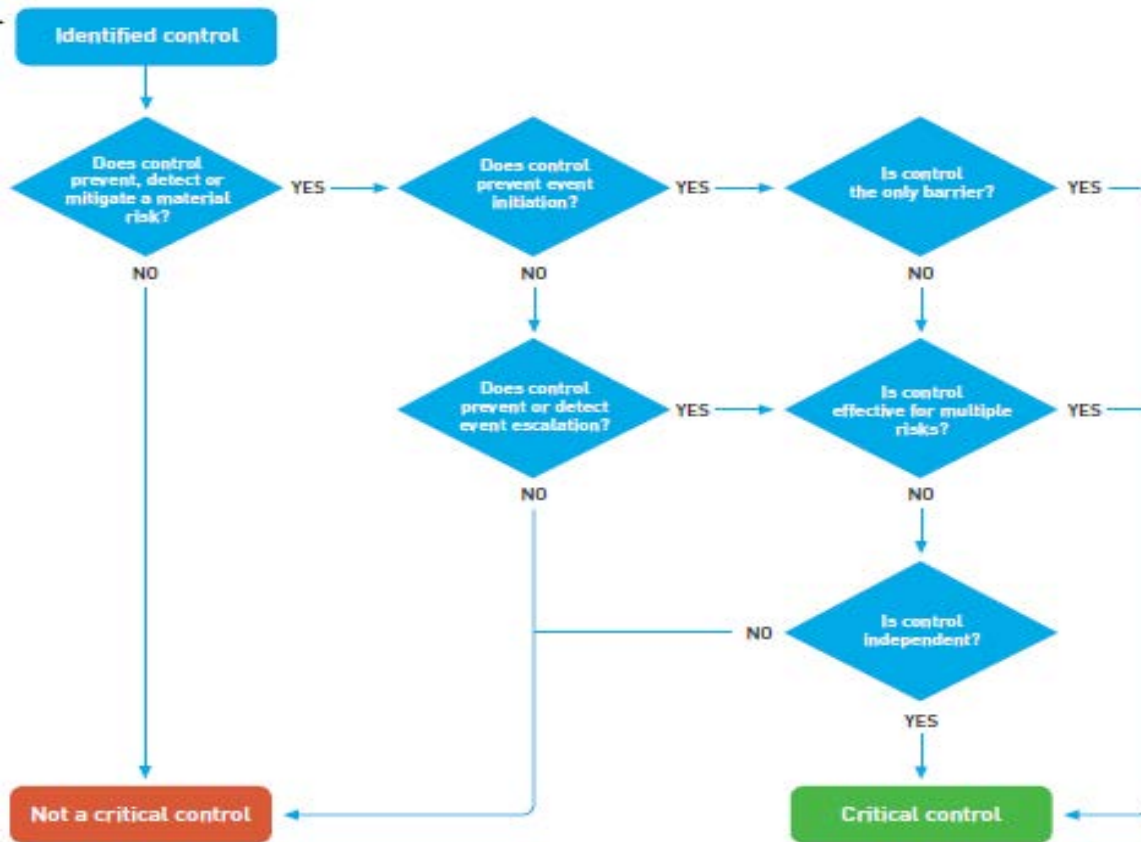
Also, the dust collection systems associated with the production process poses a significant risk of fire and explosion and needs to receive a Bowtie analysis.

We've also received a number of submissions where, Emergency Response Plans, Hot Work Programs and Management of Change Programs have been identified as critical controls. When that is the case please provide a copy of your program for review.

The last point we like to make is that we identify that a lot of work has gone into the submissions. It's evident that we share the same risk reduction goals. We knew this process was not going to be easy and to that end we continue to offer our ongoing support as we work through this.

Regards,

Geoff, Mike, Jen



Source: Adapted from BHP Billiton.