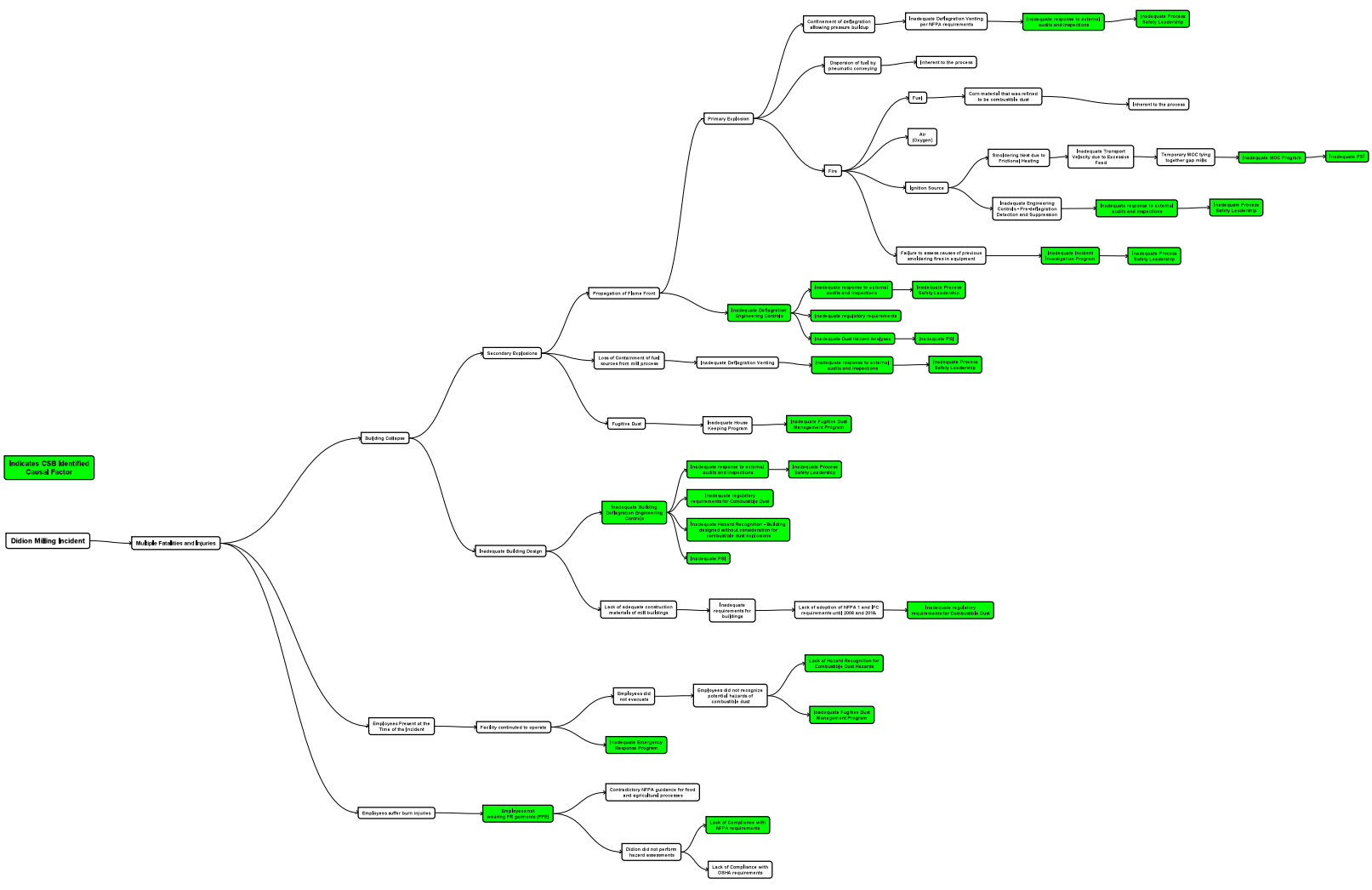
Indicates CSB Identified Causal Factor
Didion Milling Incident
Multiple Fatalities and Injuries
Building Collapse
Secondary Explosions
Propagation of Flame Front
Primary Explosion
Confinement of deflagration allowing pressure buildup
Inadequate Deflagration Venting per NFPA requirements
Inadequate response to external audits and inspections
Inadequate Process Safety Leadership
Dispersion of fuel by pneumatic conveying
Inherent to the process
Fire
Fuel
Combustible dust
Inherent to the process
Air (Oxygen)
Ignition Source
Smoldering dust due to Frictional Heating
Inadequate Transport Velocity due to Excessive Feed
Temporary MOC tying together pan mills
Inadequate MOC Program
Inadequate PSI
Inadequate Engineering Controls – Fire-deflagration Detection and Suppression
Inadequate response to external audits and inspections
Inadequate Process Safety Leadership
Failure to assess causes of previous smoldering fires in equipment
Inadequate Incident Investigation Program
Inadequate Process Safety Leadership
Inadequate Deflagration Engineering Controls
Inadequate response to external audits and inspections
Inadequate Process Safety Leadership
Inadequate regulatory requirements
Inadequate Dust Hazard Analysis
Inadequate PSI
Loss of Containment of fuel sources from mill process
Inadequate Deflagration Venting
Inadequate response to external audits and inspections
Inadequate Process Safety Leadership
Fugitive Dust
Inadequate House Keeping Program
Inadequate Fugitive Dust Management Program
Inadequate Building Design
Inadequate Building Deflagration Engineering Controls
Inadequate response to external audits and inspections
Inadequate Process Safety Leadership
Inadequate regulatory requirements for Combustible Dust
Inadequate Hazard Recognition - Building designed without consideration for combustible dust explosions
Inadequate PSI
Lack of adequate construction materials of mill buildings
Inadequate requirements for buildings
Lack of adoption of NFPA 1 and IFC requirements until 2006 and 2015.
Inadequate regulatory requirements for Combustible Dust
Employees Present at the Time of the Incident
Facility continuted to operate
Employees did not evacuate
Employees did not recognize potential hazards of combustible dust
Lack of Hazard Recognition for Combustible Dust Hazards
Inadequate Fugitive Dust Management Program
Inadequate Emergency Response Program
Employees suffer burn injuries
Employees not wearing FR garments (PPE)
Contradictory NFPA guidance for food and agricultural processes
Didion did not perform hazard assessments
Lack of Compliance with NFPA requirements
Lack of Compliance with OSHA requirements