What is a “mitigated hazard”?  

It is the hazard that remains after taking into account the controls used to prevent the hazard from causing an accident.

Why is this policy necessary? Don’t we already do hazard analysis and mitigation?  

Yes we do, and it is anticipated that very few activities will fall under this policy that are not already covered by a working alone policy. In many cases, our current integrated safety management (ISM) practices include controls that prohibit working alone for such activities as working in a machine shop or many types of live electrical work. LBNL now has an overarching working alone policy.

In addition, while controls prevent exposure to hazards under normal circumstances, the required controls do not necessarily prevent exposure to the hazard in an accident. For example, a second worker is required for many kinds of live electrical work even though electricians wear PPE to mitigate the hazards associated with their work. In another example, the minimum PPE required to work with corrosive materials (lab coat, gloves, and safety glasses) do not prevent a splash into the eyes since material splashed onto the face could run into the eyes. Using this PPE alone, working with corrosive materials should not be performed alone. However, if unvented goggles were used instead of safety glasses, or the activity were conducted behind a fume hood sash, corrosive material could not be splashed into the eyes and working alone would be acceptable.

What do I have to do to meet this requirement?  

1) Your division must update its ISM plan to define how the requirement will be met.

2) This usually means analyzing the hazards in the safe work authorizations (e.g., Work Planning and Control (WPC) Activities) and adding a sentence or two in the Description of Work stating whether or not particular activities in the authorization may be performed alone. For example, if the WPC Activity covers working with pyrophoric materials, which spontaneously ignite upon exposure to air, it might contain a sentence saying that pyrophoric materials may be handled alone if they are used in an inert atmosphere glove box, but a second person must be present if they are used in a fume hood.

What does “caught on fire” mean? Can I work with a Bunsen burner?
“Caught on fire” means being splashed with burning solvent such that the event would be incapacitating. Working alone with a Bunsen burner, hand torch, or similar device should be fine, especially if you are wearing cotton or fire retardant (not polyester) PPE.

**Does this invalidate the Good Samaritan Law?**

Unlikely. It should be noted that the primary role of the “second” person is to shut off machinery and contact emergency services (911).

**What about locked rooms, especially rooms without windows?**

Simply working in a room with a locked door and no window is not incapacitating. If the worker were performing an activity that could be incapacitating in such a room, then the working alone policy would apply.

**What about undergraduates and affiliates?**

Although this seems like a "working alone" issue in that many believe that undergraduates and affiliates should not be working alone, this is a somewhat different issue. The potential problem with undergraduates and affiliates is that they may not be sufficiently proficient to be working unsupervised. Rather than stating that undergraduates and affiliates may not work alone, it makes more sense to make sure that all LBNL employees and affiliates are proficient at an activity before they can work unsupervised. Note that proficiency includes knowing what to do in an accident.

**What about slips, trips, and falls?**

These were not considered for two reasons. First, falls from under 6’ are not considered incapacitating; even if you fall, you can activate emergency services using a cell phone. Second, these are hazards generally encountered and accepted by the general public rather than hazards due to a particular activity.

**What about medical emergencies such as heart attacks?**

While these can be incapacitating, they are generally not hazards associated with work activities, the primary exception being heatstroke. Also, as with slips, trips, and falls, these are hazards generally encountered and accepted by the general public.

**What about driving?**

This is a great question since traffic accidents can certainly be incapacitating. As with slips, trips, and falls these are hazards generally encountered and accepted by the general public.
Can the second person monitor the worker by using a video camera and remote display with audio in lieu of being “within sight or earshot”?

Approval to use a video camera and remote display with audio will be considered on a case-by-case basis and approved only by the division director or designee based on the following minimum criteria:

- The video camera is located such that the worker performing the hazardous work is in clear view, and a shout can be clearly heard by the second person monitoring the work area.
- The second person is available, agrees to, and understands his or her responsibilities.
- If the second person has to leave the monitor, the activity is considered to be working alone, and must terminate if prohibited in the work authorization.
- The second person is in the same building or adjacent building provided the monitor and work being monitored are both on the ground level and within a travel distance appropriate to the risk and severity of injury.
- Employees may be monitored by audio and video feeds, but these feeds should not be recorded by the camera or any other device because recording the monitored feeds does not promote the Working Alone Policy and so does not serve a legitimate business interest. Recording employee work is against Laboratory policy.
- Importantly, it is illegal to monitor communications without consent where there is a reasonable expectation that the communications are confidential. Accordingly, clear signage must indicate areas where monitoring occurs, and monitoring should be done via a clearly visible camera.
- Video and audio feeds should be monitored by an employee who agrees to and understands the monitoring responsibilities. The second person should be able to quickly respond and take appropriate emergency actions.
- Monitoring must not occur in any area where there is a reasonable expectation of privacy, e.g., a restroom, shower, or locker area. This includes areas over which an employee has exclusive use, including an employee’s desk, computer, or locked file cabinets where covered work does not occur.
- Since monitoring should only occur during the course of hazardous work, the employee doing the work should alert the monitor when work is beginning and ending.
- Employees may request to have a monitoring system put in place. If a supervisor, and not the monitored employee, requests the monitoring system, then the employee(s) working in the area must provide written consent.