1. **Natural Threats**
   1. Threats
      1. Earthquakes
         1. Threat sources: Being near a fault in southern California
         2. The likelihood of occurrence for an earthquake in southern California is relatively high. They get earthquakes a lot due to the San Andreas fault. Upstream and downstream loss would probably be high, but it depends on the earthquake. If the earthquake is relatively mild, then I don’t think it would do much to change business. If it’s an extreme earthquake that would be a bit different and the company could be down for days or weeks while things are repaired.
      2. Flooding
         1. Threat sources: California experiences a lot of rain and when this rain comes fast and there’s a lot of it, it can cause some flash flooding and other minor flooding.
         2. The likelihood of occurrence for this flooding to take place is high. It seems to happen every year a few times. The severity is typically not bad enough to effect business.
      3. Wildfire
         1. Threat sources: California suffers from wildfires more often than any other state, by a lot. California had 11.8 million wildfires last year, while Oregon which is in second place, only had 797 thousand.
         2. The likelihood of occurrence for a wildfire in California is very high. A wildfire like this would only effect business if it was near where the fires were happening. So, this would really be on a case-to-case basis.
      4. Tsunamis
         1. Threat sources: While California does suffer from tsunamis on occasion, they are not all that common here. They certainly don’t cause much damage usually either, except for buildings that are right near the shore in which the tsunami strikes.
         2. The likelihood of occurrence for a tsunami is low. Although they do happen, it’s not too often, and when they do occur, they’re not usually very severe.
      5. Severe Thunderstorms
         1. Threat sources: While California does get severe thunderstorms, they don’t happen very often and typically not all that bad.
         2. The likelihood of occurrence for a severe thunderstorm to occur is annual. California only has a handful of these storms each year and they are in southern California.
   2. Likelihood of occurrence
2. **Wildfire –** California suffers from more wildfires each year than any other state. Out of all the natural threats listed this is the most dangerous.
3. **Earthquakes** - Since most earthquakes in southern California are mild, I would say it wouldn’t affect the company too much, however, they would be relatively frequent.
4. **Flooding –** California experiences about 16 inches of rainfall each year in Fremont where the company is located. This is across 60 days of rainfall each year on average. I think flooding could affect the company if it’s severe enough around the building but otherwise I don’t think it would be that much of a threat.
5. **Severe Thunderstorms –** Severe thunderstorms are rare in California, but they are more common than tsunamis and happen in southern California near where the company is based.
6. **Tsunamis** – Tsunamis don’t occur very often in California and when they do, they aren’t typically very severe. They only really effect the areas near the beach. Since Fremont is a bit in-land I don’t think, we would have to worry much about these happening, but if one did reach the building it could cause some damage.
   1. Likelihood and vulnerability
      1. Wildfire
      2. Earthquakes
      3. Flooding
      4. Severe Thunderstorms
      5. Tsunamis
   2. Impact of each threat on business operations
      1. **Wildfire –** If a wildfire were to hit the company it could be detrimental to the business as this could take down the entire building and the supplies in it.
      2. **Earthquakes –** If an earthquake were to strike the building and it were severe enough it could be detrimental to the business as well because this could bring down the entire building. Although the likelihood of a massive earthquake like that taking down the building is relatively low, it is possible.
      3. **Flooding –** California doesn’t experience that much rainfall in the city where the building is at, so I don’t think this would affect business much.
      4. **Severe Thunderstorms –** Severe Thunderstorms don’t occur much in California so I don’t think these would change business much.
      5. **Tsunamis –** Similar to severe thunderstorms, I don’t think a tsunami would affect the business much as they are relatively rare in that area. That being said, it is still possible.
7. **Man-made Threats**
   1. Threats
      1. Gas leaks
         1. Threat sources: Gas leaks can occur at any point. Although these are typically not very severe, when they are severe it can cause explosions, or a leak that makes it unsafe to work in the building until that gas has been removed.
         2. If there was a gas leak at this company it could cause a stop of production while the gas is removed from the building. If the leak is bad enough it could also cause an explosion that could cause a large stoppage of business and workflow.
      2. Attack on the building itself
         1. Threat sources: A physical attack on the building could range from a variety of different things. I think the best way to prevent this is to hire good security to monitor the building and who comes in and out of the building on a 24/7 basis.
         2. Although I think it is unlikely, an attack on the company could cause a lot of damage. Until the threat is neutralized no one would be able to work and there would need to be some time after this happened for recovery.
      3. Power outage
         1. Threat sources: Power outages are relatively common across the US. They don’t usually last very long, but I’ve lived places where they can last up to a week where people just don’t have power.
         2. Without power there can’t be any work. We rely on electricity to power everything. Most infrastructure is digital nowadays, and without power we can’t access that. We also can’t operate any machinery without power.
   2. Likelihood of occurrence
      1. **Power outage** – I think a power outage is the most likely of the man-made threats that I could come up with.
      2. **Gas leak** – I think the next up on the list of man-made threats would be a gas leak. Although not very common and not usually all that dangerous, they can cause quite a bit of issues if they occur near your area. Sometime something as extreme as an explosion.
      3. **Attack on the building itself** – I find this to be a very low possibility of happening. On the off chance that an individual or a group did come into the building and attack, it would obviously cause work to stop, and could cause some more long-term damage as well. But due to the unlikeliness of something like this happening I don’t think there’s much to worry about here.
   3. Likelihood and vulnerability
      1. Power outage
      2. Gas leak
      3. Attack on the building itself
   4. Impact of each threat on business operations
      1. **Power outage –** A power outage would completely halt business until the power was restored.
      2. **Gas leak –** A gas leak could cause the company to stop production for awhile if the issue was that severe in the first place, however the likelihood of a major gas leak to occur is small.
      3. **Attack on the building itself –** I don’t think that an attack on the building is a very likely threat, however it is something that should be prepared for. This is because it if were to occur it could cause a lot of damage and cause the company to stop production for quite a while.
8. **IT and Technology-based Threats**
   1. Threats
      1. Hacks
         1. Threat sources: A hack would come from any person or party that gains unwanted access to the network.
         2. If a hack were to occur, it would entirely depend on what this hack gave the hackers access to. If they were able to gain access to the domain controller this would because the company to be down for a long time. If they couldn’t access much or were kicked off the network relatively quickly it might not be as big of a deal.
      2. Hardware / Infrastructure failure
         1. Threat sources: For something to fail hardware or infrastructure wise, would just happen from worn out or aging parts.
         2. When hardware fails, it shouldn’t be a big deal because you should have redundancy in place and planning for when it’s going to happen because it will.
   2. Likelihood of occurrence
      1. **Hacks –** It’s hard to say how likely a hack is to occur on a company. I think it depends on how vulnerable this company is, as well as the footprint they have. If a lot of people know about it then that will put a bigger target on them. But they can also prevent this by having all the proper network security measures in place.
      2. **Hardware / Infrastructure failure** – Hardware is bound to fail at some point during the operation of any company. Things just age and become more unreliable the older they get. The best way to remedy that is to plan for it.
   3. Likelihood and vulnerability
      1. Hardware / Infrastructure failure
      2. Hacks
   4. Impact of each threat on business operations
      1. **Hardware / Infrastructure failure** – If the right redundancy is in place this will be seamless and not cause many problems to the company. There will likely be some minor hiccups here and there but overall, I think that most companies have policies in place to help with situations like this.
      2. **Hacks** – Proper pen testing and revisions to security policies should prevent any vulnerabilities from being taken advantage of. That being said, hacks do still happen. The severity of one happening solely depends on the security of that company and how good or bad the hacker is.

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