HONDA ENGINE & TRANSMISSION PLANT Case Study

Incident

A large Honda Engine & Transmission Plant in Celaya, Mexico suffered substantial flooding after heavy rains overwhelmed nearby dams. Water was released, and homes and business in lowlands were severely impacted. Various buildings within the automotive facility campus were under more than two feet of muddy, river water. AREPA was called in to help create a project management plan and to assess the damage in the engine facility. Our crew was needed to help decontaminate the machine operations, electrical systems and electronics, CNC operations, dye cast machines, controls, robotics, and the engine transmission assembly.

After an initial site tour of the plant, we worked alongside the insured's internal teams to prioritize equipment for decontamination. The goal was to get them back to some form of production as quickly as possible, even if it wasn't at full capacity. The decision was made to focus on the transmission assembly. Our project plan was detailed and thorough, and because of this, was later adapted for other areas of the facility.

Challenges & Logistics

We assembled a crew as quickly as possible, and altogether, the team totaled anywhere from 25-30 crew members at any given point in time. Materials and supplies were organized through local companies for quicker service, and a command center was established with a project manager and key lead managers to make sure staff were always equipped, monitored for safety, and able to operate as effectively and efficiently as possible.

Generating enough power to produce light and keep equipment running was challenging, as well as access to clean water to support the cleaning operation. All were overcome, and AREPA was able to perform a full aqueous procedure for the facility.

Outcome

The decision was made to decontaminate instead of replace, which sped up the process immensely to get the facility back to production. Full replacement would have taken years. There were more than 100 CNC machines, and many were too large to replace. Some equipment was also custom, and the facility was already losing money every day it wasn't in business. Aside from anything that was fully submerged and considered a necessary replacement, everything else underwent decontamination.

Due to the nature of the incident, the river water contained very fine particles, and therefore everything had to undergo a full aqueous procedure and drying process. All items were tested and cleaned up to IPC standards (which is customary for the electronic manufacturing industry). The entire operation took two months. And in that time, we were able to get the engine facility back up and running smoothly. Altogether, we cleaned more than 500 pieces. The cost savings to the insured were immeasurable, as full replacement could have shut down the plant for years to come.

Highlights

- Honda Engine & Transmission Plant assembly plant in central Mexico underwent substantial flooding from nearby rivers.
- AREPA assembled a 30-person team of specialists to meet the quick demand for the insured's facility.
- The engine facility was in need of decontamination.
- Replacement was not an option because of the amount of both standard and custom equipment, and the length of time it would take to replace within a realistic timeframe.
- Project plan was put into place and later replicated by facility management for other areas of the plant.
- Full aqueous procedure and drying process was performed.
- Two months later, engine facility was up and running.
- Team performed so well, the facility asked AREPA to also sanitize and decontaminate their commercial kitchen.
- 66 It has been a great experience and pleasure working with the AREPA team. The activities performed by AREPA assisted the Honda Engine Plant in resuming a normal production environment quickly and to plan. I would recommend them to any Company that requires some form of recovery assistance. ??

⁻ Andrew Silver, Engine Plant Manager