At 4:00 p.m. on August 15, 2003, TX-TF1 was activated by GDEM in advance of Hurricane Erika's landfall. As a result, a 33 member Type-III US&R Task Force departed College Station for staging at Martindale Army Air Field later that evening. The Type-III US&R Task Force was equipped to respond to flooding and swiftwater rescue events, provide command and control support, and augment the communications capabilities of local emergency responders.

Hurricane Erika was predicted to make landfall along the Texas coast from Nueces County stretching south to Cameron County and was eventually rated as a Category 1 Hurricane on the Saffir-Simpson Hurricane Scale.

On August 16, Hurricane Erika made landfall in northeastern Mexico producing a moderate amount of rainfall which caused mudslides and flooding near the impact area; however, Southeast Texas was not as severely impacted as originally predicted. By 1:00 p.m., after receiving no calls for assistance, TX-TF1 received their demobilization orders from GDEM and returned to their headquarters in College Station.