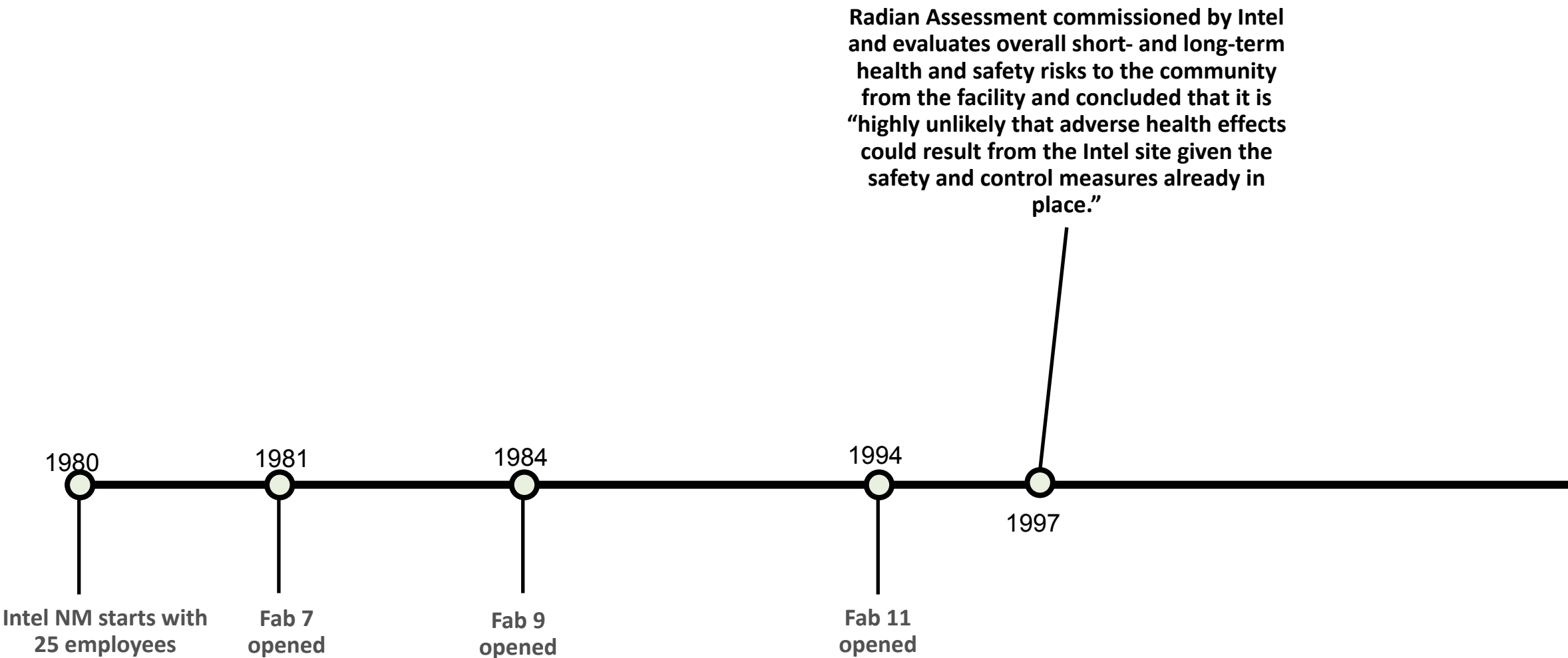


# Timeline of CEWG Accomplishments and Health Studies



Intel commissions ERM to review and update the Radian Assessment.

NMED-AQB publishes Health Risk Assessment for the village of Corrales. The “health risk assessment did not find evidence that any of the modeled or measured chemicals are associated with increased acute or chronic health risks,” but did note that there were uncertainties associated with the data. Overall, the health study is one of “most comprehensive studies of air toxics related health effects ever to be completed for any community in the state.”

Gradient presents the results of an Air Quality Health Evaluation commissioned by NMED. Study includes air monitoring and modeling data. They identified that chronic and acute health affects were “unlikely to occur due to Intel emissions.”

Corrales Air Quality Task Force forms to give input on NMED’s air quality study, funded by EPA.

Community members petition ATSDR to conduct a public health consultation

Data is collected by NMED about health and odor complaints from residents. Monitoring is conducted using Open Path FTIR –collected simultaneously by NMED and a contractor on behalf of Intel\*

CEWG is formed.

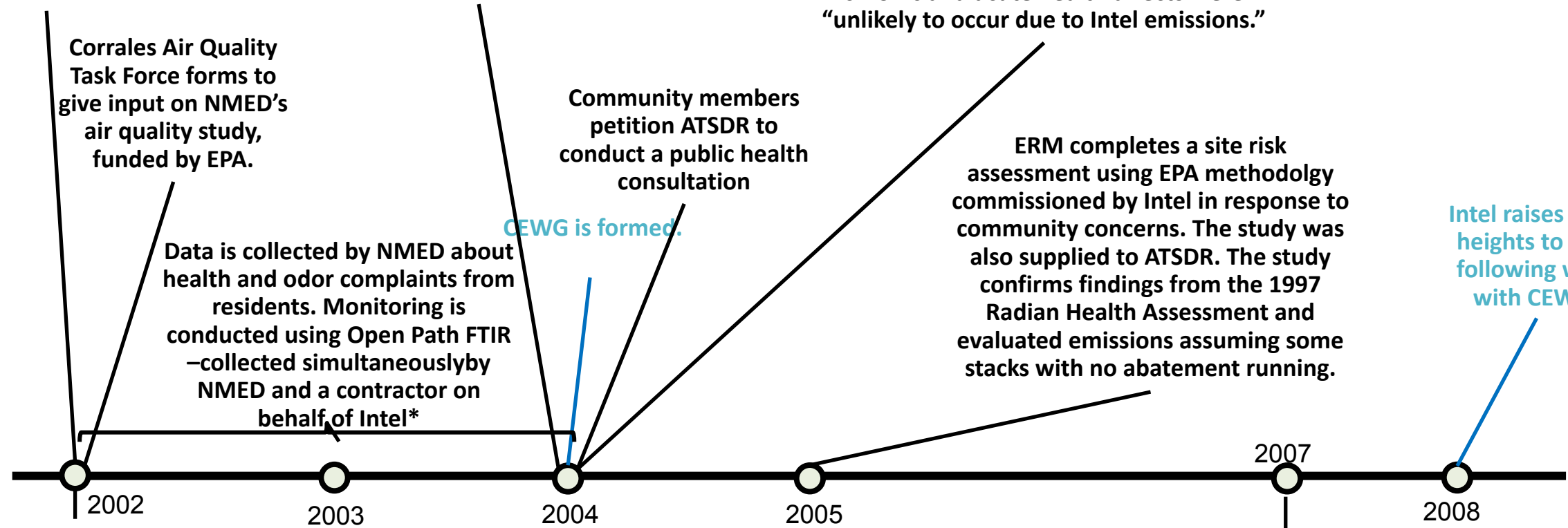
ERM completes a site risk assessment using EPA methodology commissioned by Intel in response to community concerns. The study was also supplied to ATSDR. The study confirms findings from the 1997 Radian Health Assessment and evaluated emissions assuming some stacks with no abatement running.

Intel raises stack heights to 30m following work with CEWG.

Fab11X opened, which becomes the world’s largest semiconductor manufacturing facility at the time

\*Open Path FTIR also collected by CRCAW. No formal report was made available to CEWG.

2007  
\$2 billion investment in NM for 45nm



ATSDR publishes a Draft Health Consultation for public comment. Intel and CEWG submit comments.

EPA sends Intel a 114 Information Request and conducts a weeklong inspection.

Following a request from a concerned citizen, NMDOH investigates pulmonary fibrosis cases in Corrales. NMDOH finds that "an idiopathic pulmonary fibrosis cluster was not identified."

Completed raising the heights of all RTO stacks (chimneys) from 30 meters to 40 meters to reduce significantly the maximum ground level concentrations of pollutants

Mike Williams conducts a study of Hydrogen Fluoride emissions using the AERMOD model, meteorological inputs, and median emissions from Intels Stack Testing over 2010-2012. Model does not find peaks over the screening level of  $15\mu\text{g}/\text{m}^3$  from TX Commission on Enviro Quality.

[exploreintel.com](http://exploreintel.com) created

Additional Munters thermal oxidizers are installed for full VOC redundancy. New Munters have 40m stacks per CEWG recommendation.

CEWG and Intel arrange for independent testing for crystalline silica from Intel's stacks through a citizen's protocol developed through a Silica Testing Task Force. Samples are analyzed by NIOSH and of the 20 samples collected, only one returns a detectable value, 5 orders of magnitude below CEWG's provisional level of  $1\mu\text{g}/\text{m}^3$

CEWG completes its Citizen's Protocol for sampling

Reduced usage of HMDS by a factor of 3 since 2005 and a factor of 8 since 1994.

Rain caps were removed from the boiler stacks to increase exit velocity of stack flow.

2009

2010

2011

2013

ATSDR publishes final Public Health Consultation. The study also reviewed and past studies, including the NMDOH pulmonary fibrosis study and crystalline silica testing. Study stated that “ATSDR cannot fully evaluate potential exposure to nearby residents, nor can ATSDR address the potential health impact of chemical mixtures.” and recommended continued study.

Intel implements a MIOX biocide generator and discontinues use of sodium bromide in cooling towers, to reduce bromoform emissions and odors.

NM Department of Health finalizes a study of Amyotrophic Lateral Sclerosis (ALS) prevalence in Corrales. The study reviewed medical records and self reports from residents from 2000-2015 DOH compared the observed number of ALS patients in Corrales to the expected prevalence. DOH concluded that “the estimated number of ALS cases diagnosed in Corrales is similar to what would be expected for a community of this size and age-distribution.”

NM Cancer Concerns Work Group Assessment authors report on cancer cases in response to a request by CRCAW. Report evaluated cancer cases in 14 census tracts near the Intel plant for a study period of 2006-2015. The study found overall cancer rates similar to statewide rates. Rates of prostate cancer and myeloid leukemia showed statistically significant increased above the expected rate.



# Resources for more

[www.CEWG.org](http://www.CEWG.org)

Short reports to community  
Health Studies

[www.exploreintel.com](http://www.exploreintel.com)

All reports and information presented here is publicly available on these two sites.