Norsk Hydro Saves \$8,000,000 and Avoids Long-Term Remediation

Based in Norway, Norsk Hydro (Hydro) is a global supplier of aluminum with activities throughout the process chain, from bauxite extraction to the production of rolled and extruded aluminum products and building systems.

Hydro purchased an aluminum extrusion plant in the Midwest United States that formerly used trichloroethylene (**TCE**) and perchloroethylene or tetrachloroethylene (**PCE**) for parts degreasing.

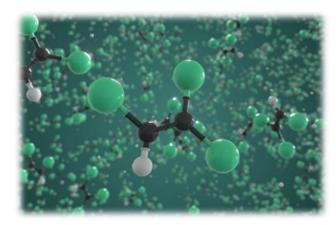
As part of a purchase agreement, Hydro had five years to <u>assess the environmental</u> <u>liability</u> at the site. After this time, Hydro assumed all liability. They were four years into the assessment and were very concerned with the ability of their environmental consultant (a large national consultant) they had hired to protect their interests.

The \$9 Million Issue

Soil, sediment, and groundwater beneath the plant were impacted by TCE and PCE.

TCE-impacted groundwater was identified in **residential drinking water wells** in the adjacent neighborhood, and the state regulators were "pointing their finger at Hydro."

Hydro's environmental consultant had recommended a \$9,000,000 groundwater pump-and-treat system, a shocking and unexpected price tag to Hydro. After discussions with legal counsel, Hydro was referred to Dragun Corporation to conduct a peer review of the data.



Dragun's \$8 Million Saving Solution

Following our peer review, we came to a much *different conclusion* than the existing "remedy."

- First, we **discovered major technical flaws** in the national consultant's data interpretation and basic site characterization.
- Second, we found that the national consultant completely missed an aquifer, which accounted for their gross mischaracterization of the site.

- Third, we showed Hydro that the national consultant reported impossible groundwater velocities. Furthermore, their consultant's conclusion regarding groundwater flow was completely wrong.
- Fourth, we clearly demonstrated, and the regulators agreed, that the proposed \$9,000,000 groundwater pump-and-treat system was unnecessary.
- Fifth, we demonstrated that the TCE plume in the adjacent neighborhood was not from Hydro's property, thus **keeping them out of a major lawsuit.**
- Finally, we completed the site investigation and remedial action plan in six months.
 We closed the site by obtaining the first industrial land-use remedial action plan in
 this district, saved Hydro \$8,000,000, and avoided a long-term remediation system.
 Importantly, the state regulator no longer suspected Hydro to be the source of
 contamination affecting the adjacent neighborhood.

Hydro wrote us a letter at the conclusion that said, in part:

"The project was quite comprehensive and thorough in determining the extent and the most cost-effective solution to the problem...It is because of the thoroughness of Dragun Corporation...that Hydro is very satisfied with not only the level of service provided but with the outcome of the remediation project. We would not hesitate to recommend Dragun to other businesses in need of hydrological assessments."