



# Full speed ahead for Audi – German ex-refinery site environmental remediation pushes ahead with safe working practices

Stephen B. Harrison, sbh4 GmbH, www.sbh4.de, sbh@sbh4.de

The comprehensive environmental remediation of an ex-refinery site at Ingolstadt to make way for the IN-Campus technology park development has achieved 250,000 safe working hours

Despite the Coronavirus, 500 people have continued their environmental remediation and building work uninterrupted at the 75 hectare IN-Campus development in Ingolstadt. “We are taking all of the relevant precautions by respecting the social distancing procedures and wearing suitable face masks” said Dr. Rüdiger Recknagel, Chief Environmental Officer at Audi. Safety has always been the number 1 priority at the IN-Campus site and the workforce has just achieved the milestone of 250,000 hours of incident-free operations since work commenced in 2016”. Automotive production operations in the Audi factory close by took a pause recently, restarting on the 29th of April. But, for the team working on the IN-Campus project the work continued unabated.

“My team are so proud to be involved in this project, which we believe is the largest ex-refinery remediation task ever undertaken in Germany” adds Recknagel. During more than four decades of operations at the refinery which previously existed on this site, there were occasional spillages of oil and other chemicals. This is the legacy which the IN-Campus team are now working to remediate. “Our environmental management experts know that it is a once in a lifetime opportunity to return such a beautiful piece of land bordering the river Danube to its pristine condition. And I am immensely proud of them because they are working so responsibly and achieving all our milestones”.

“The excellent safety statistics are just one example” continues Recknagel. “We are also working within our budget and proceeding according to our timeline. Up to now, we have cleaned-up about 400,000 Tonnes of sand and stones from the site. That’s about 65% of the total requirement. And the technologies that we have chosen are performing as expected to return the site to a very high environmental standard: up to now, they have successfully captured and disposed of 450 Tonnes of hydrocarbon pollutants”.

Safety and respect for our natural environment are the heart of the project concept. Thomas Vogel, Managing Director of IN-Campus GmbH, which is the joint venture between AUDI AG and Stadt Ingolstadt that is responsible for the site development, explains how these concepts are also core to the long-term vision: “The innovation campus that will be created on this site will be used to develop emissions-free driving systems such as Audi’s range of battery electric vehicles. There will also be a state-of-the art crash test facility to ensure that our cars offer the highest standards of safety for their occupants and other road users”.



Copyright AUDI AG Dr. Rüdiger Recknagel Audi Chief Environmental Officer (third from right) at IN-Campus



Copyright AUDI AG Dr. Christian Lösel (left), Lord Mayor of Ingolstadt, and Dr. Rüdiger Recknagel, Audi



Copyright AUDI AG Dr. Rüdiger Recknagel (on right) Audi Chief Environmental Officer



Copyright AUDI AG Markus Söder Bavarian Ministerpresident (centre) Dr Christian Lösel (second from left) Lord Mayor of Ingolstadt and Mr Thomas Vogel (right)

“In the 1960’s an oil refinery was constructed on this site” says Sabrina Kolb, who is the spokesperson for sustainability at Audi. She puts the history of the site into context, saying: “there were five refineries built close to Ingolstadt. After more than 40 years of operation, the activities at one of those refineries were consolidated into two of the others and it closed. That’s when we had the opportunity to invest in this site and transform it to a technology park and contribute of the city’s vision for the future”.

The technology park that will be created is not only for use by Audi, it will also become the home for many automotive sector suppliers and service providers. Innovative digitalisation concepts such as autonomous driving and the car/driver user interface will also be developed. With the broader energy transition, industry mega-trends and employment shifts in mind, it’s a sign of the times that a European refinery is making way for battery electric vehicle development, a car safety testing centre and automotive focused high-tech ventures.

Stephan Brun, Environmental Protection Expert at Audi joins the discussion: “Specialism is the way to achieve perfection. IN-Campus will be home to highly focused companies which are leaders in their respective niches. It’s the same philosophy that we have here at Audi. Outstanding results are only possible when we apply our deep expert knowledge in our respective fields in the areas where it is most relevant”.

One of the unique aspects of the site remediation work is that almost all the activities are taking place on-site. A small percentage of material is removed from the site for further processing and disposal, but most of the remediation is being completed using equipment that will remain on the site until the clean-up work is complete. Air sparging is used to release volatile pollutants from 10 hectares of land where the refinery and its associated storage tanks once stood. These chemicals are then incinerated using a flare at the site.

Ground water is pumped to the surface where it is purified using a water treatment system which relies on a combination of physical adsorption processes to remove contamination. 1,200 Tonnes per day of sand, gravel and stones from the ground are excavated and thoroughly washed on site in a purpose-built unit. After this washing process, 90% of the excavated material can be returned to the site to form a clean and stable foundation for future building construction leaving only a minimal amount for further offsite processing or disposal.



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