

Respecting the local environment

Minimizing the environmental impact of our operations to protect local water systems, maintain air quality and keep noise within permitted levels

We have an unbreakable commitment to meet and exceed the environmental protection standards set by governments and regulators wherever we operate globally, and West Virginia is no exception. Responsible environmental stewardship has been one of our core values for more than 80 years and we continually strive to reduce the environmental impact of our manufacturing activities. This is realized in practice through investments in areas such as best available emissions control technology.



LOCAL WATER SYSTEMS

The production process at our Ranson facility will operate using a closed-loop system, designed to prevent the contamination of soil and groundwater. Production process water is continually recycled and reused and no production process water will be discharged into waterways, sewer systems or groundwater. In fact, the only water we will discharge into the sewer system is from sinks, toilets, and the residual water from the water treatment processes.

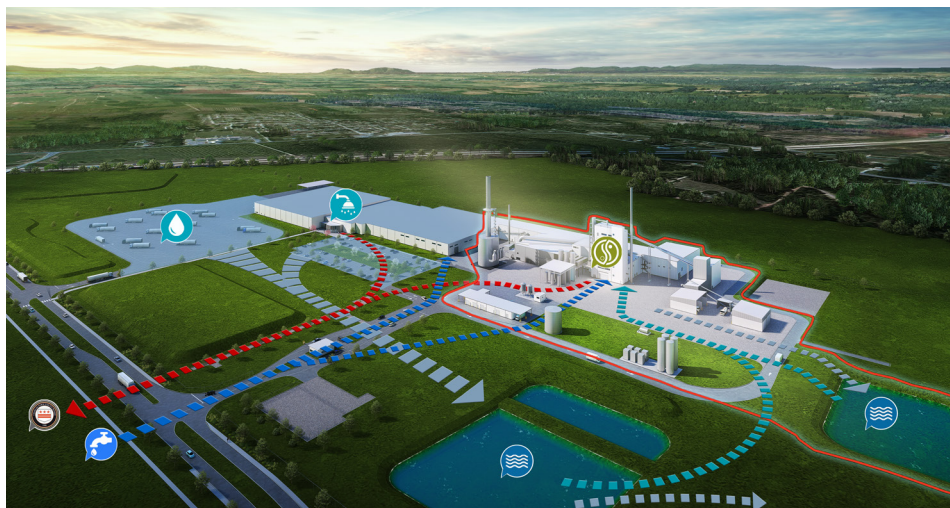
As part of our efforts to reduce water consumption, the facility will use rainwater, collected in secure on-site ponds with enough capacity to withstand a 100-year storm event, as the primary source of water in the production process. In cases where rainwater is not sufficient for our production process, our water supply will be supplemented by Jefferson Utilities, Inc. Total water consumption will not exceed 125,000 gallons per day.

We're also constructing the manufacturing site to ensure protection of the karst geology with the following design elements:

The production process water is in a closed loop (some will naturally evaporate).

Rainwater from production and raw material areas is collected and used in the production process.

Storage tanks will be in secondary containment and both the tanks as well as the pipes connecting them, will be above ground to enable close monitoring of the system.



Legend

- JEFFERSON UTILITIES INC. WATER SUPPLY
- WATER SOFTENING/REVERSE OSMOSIS TREATMENT PLANT
- RAINWATER COLLECTION PONDS
- CLOSED LOOP PRODUCTION SYSTEM
- RAINWATER FROM PARKING LOTS, ROOFS AND OUTSIDE PAVED AREAS
- STAFF AMENITIES (TOILETS, SINKS, AND SHOWERS)
- WATER DISCHARGED FROM THE WATER TREATMENT PROCESS AND STAFF AMENITIES IS SENT TO THE CHARLES TOWN WASTEWATER TREATMENT PLANT.
- WATER SUPPLY FROM JEFFERSON UTILITIES INC. IS EITHER ROUTED DIRECTLY TO THE CAFETERIA, SHOWERS AND TOILETS, OR FLOWS INTO THE INSULATION PRODUCTION PROCESS. THAT PROCESS IS A CLOSED LOOP PRODUCTION SYSTEM.
- WATER FROM THE RAINWATER COLLECTION PONDS PROVIDES ADDITIONAL WATER SUPPLY FOR THE PRODUCTION PROCESS.
- RAINWATER IS COLLECTED FROM ROOFS, PARKING AREAS, AND OUTSIDE PAVED AREAS BEFORE BEING PIPED TO A RAINWATER COLLECTION POND AND REUSED AS A SOURCE FOR PRODUCTION, OR DISTRIBUTED TO A CONTROLLED OVERFLOW AREA.
- SEWER LINE INCLUDES SANITARY DISCHARGE FROM STAFF AMENITIES AND DISCHARGE FROM THE WATER TREATMENT PLANT.

AIR QUALITY

For decades, we have successfully operated multiple manufacturing facilities around the world, many situated near schools, neighborhoods, businesses, recreational facilities, vineyards and even national parks.

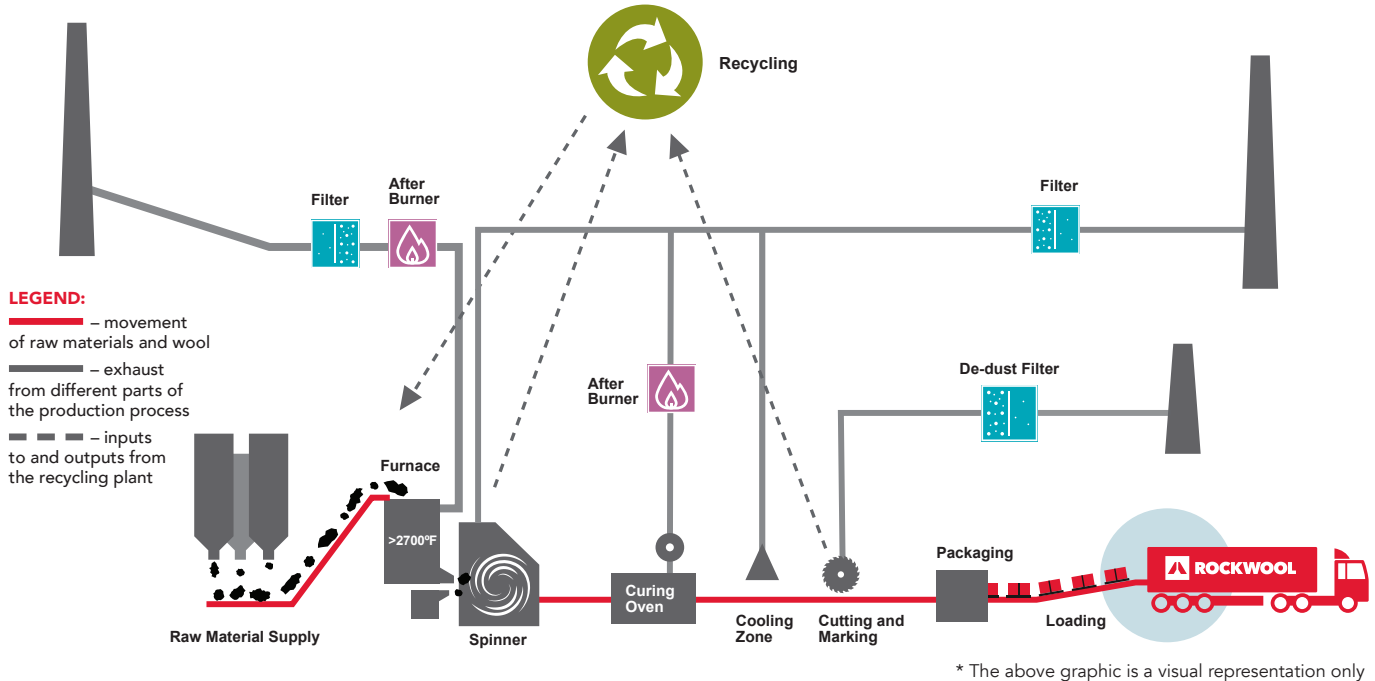
In West Virginia, our permitted emissions will be well within the limits set by the U.S. Environmental Protection Agency, West Virginia Department of Environmental Protection, and in accordance with the Clean Air Act. These strict limits are specifically designed to safeguard sensitive populations including children, the elderly and asthmatics.

At this facility, we are using Wet Electrostatic Precipitator technology to reduce particulate matter by 95-99 percent. This system is considered Best Available Control Technology for PM_{2.5}. Additional emissions controls as shown below in the production process diagram, will reduce the concentration of volatile organic compounds such as formaldehyde, phenol, and methanol, as well as nitrogen oxides (NO_x), to a level defined as "insignificant" by the National Ambient Air Quality Standard.

For additional reassurance regarding the facility's environmental safety, ROCKWOOL is providing two local air monitoring stations that will begin monitoring air quality from one year before expected start of operations through to December 31, 2022. Through the air monitoring program, community members will have access to publicly-available data to track and benchmark air quality levels of fine particulate matter (PM_{2.5}), formaldehyde, nitrogen dioxide (NO₂), and sulfur dioxide (SO₂). The monitors will measure air quality that is affected by all emitting sources including the ROCKWOOL facility.

In agreement with the Jefferson County Board of Education, the air monitors will be installed, operated, and maintained by Environmental Resources Management (ERM), a third-party environmental consulting firm. ERM identified the two locations for the air monitors – North Jefferson and TA Lowery Elementary Schools – based on EPA siting guidelines and factors including the proximity of sensitive receptors (children, in this case) and an air quality dispersion model analysis.

ROCKWOOL Production Process in Ranson, West Virginia



NOISE LEVELS

During operations, the facility will not exceed permitted levels as outlined in the Jefferson County Commission Noise Ordinance Policy. Based on other factories that we operate, we anticipate noise levels below 50 dB at our property line – the equivalent to a quiet suburb or a conversation at home.

Since it began operations in 2014, our sister facility in Marshall County, Mississippi has received zero noise complaints. ROCKWOOL will be using much of the same technology that has achieved those results, at our Ranson, West Virginia location.

We're passionate about respecting the environment and are continuously working to improve the sustainability of our operations so that we leave the smallest footprint possible.

Learn more by visiting rockwool.com/west-virginia/environment

We also encourage you to keep up to date with the ROCKWOOL Ranson project by subscribing to our community newsletter at: rockwool.com/wvnewsletter

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