AGILENT SOLUTIONS CAN DETECT AND IDENTIFY PHARMACEUTICALS IN WASTE, SOURCE AND FINISHED WATER

AGILENT SOLUTIONS DETECT PHARMACEUTICALS, TRANSFORMATION AND DISINFECTION BY-PRODUCTS

AGILENT SOLUTIONS CAN BE USED TO MEASURE THE PRESENCE OF PHARMACEUTICALS IN ENVIRONMENTAL ECOSYSTEMS

UNWANTED PHARMACEUTICALS ARE OFTEN DISPOSED OF AT HOME AND TRANSPORTED TO LOCAL TREATMENT PLANTS

MANY PHARMACEUTICALS AND POLLUTANTS ENTER LOCAL WATER SOURCES THROUGH RUN-OFF, OR SEEPAGE, FROM ANIMAL AND AGRICULTURAL USE OR VIA WASTE STREAMS FROM INDUSTRIAL PRODUCTION

POLUTANTS AFFECT WILDLIFE, LIKE FISH, AND LIVESTOCK, INCLUDING CATTLE

SECURING A SAFE WATER SUPPLY: THE IMPACT OF PHARMACEUTICALS

WHILE PHARMACEUTICALS ARE VITAL FOR HUMAN AND ANIMAL HEALTH, THEY MAY ENTER THE WATER SUPPLY THROUGH VARIOUS ROUTES, EVADING TREATMENT AND PROCESSING. THE PRESENCE OF PHARMACEUTICALS IN DRINKING WATER AND WATER SOURCES MAY HAVE ADVERSE EFFECTS ON PEOPLE AND THE ENVIRONMENT.

1. PRIMARY TREATMENT SEPARATES OUT LARGE PARTICLES
2. SECONDARY TREATMENT REMOVES ORGANIC MATTER BY ALLOWING BACTERIA TO BREAK DOWN POLLUTANTS
3. PHARMACEUTICALS CAN INTERFERE WITH BACTERIA BREAKING DOWN POLLUTANTS IN THE WATER
4. FINAL POLISHING DISINFECTS WATER TO REMOVE REMAINING BACTERIA
5. RESIDUAL PHARMACEUTICALS AND BY-PRODUCTS CAN BE RELEASED AND APPEAR IN WATER DISTRIBUTION SYSTEMS
6. DISINFECTION TREATMENT CAN ALTER RESIDUAL PHARMACEUTICALS, CREATING DISINFECTION BY-PRODUCTS THAT MAY POSE A GREATER RISK THAN THE PARENT COMPOUNDS

AGILENT’S SOLUTIONS HELP DETECT AND IDENTIFY PHARMACEUTICALS AT EVERY STEP, ENCOURAGING THE IMPLEMENTATION OF NEW TREATMENT PROCESSES TO ENSURE THEY DO NOT MAKE IT BACK INTO HOUSEHOLD WATER