



ABOUT Ottawa County Farms Landfill

- ✓ 800 acres
- ✓ Proud community partner
- ✓ Landfill gas and sustainability
- ✓ State of the art leachate treatment
- ✓ Extensive groundwater monitoring

Community Impact

12

full time
employees

39

years in local
community

\$450K

in host and good
neighbor agreements

COMMUNITY PARTNERSHIPS WITH THE FOLLOWING ORGANIZATIONS

Polkton Township's Clean-Up Day

Coopersville School Athletics

Coopersville Summer Reading Program

Girls on the Run

Loris Voice and the Coopersville
Christmas Parade

Ottawa County Department of Public Health

Department Resource Recovery Centers

The West Michigan Sustainable
Business Forum

The Coopersville Area Chamber of Commerce

The Rotary Club of Coopersville

Ottawa Deepwell

4,270

Feet of thick, impermeable geologic formations, permanently securing landfill liquids

1+ Mile

Injection interval sits far beneath any potentially viable aquifer or drinking source

81

Acres of natural subsurface formation where landfill liquids could be safely injected

22

Deepwells already operating statewide today

800+

Deepwells now operating nationwide

12

Daily semi-truck trips to be eliminated, helping reduce carbon emissions



What is an Industrial Well?

Class I wells allow for the injection of leachate far below the lowermost groundwater drinking zone.



Layered concrete and steel barriers

DRINKING WATER AQUIFER

Multiple steel and cement barriers separate and protect drinking water aquifers

Pressurized well seal fluid is monitored continuously

CAP ROCK

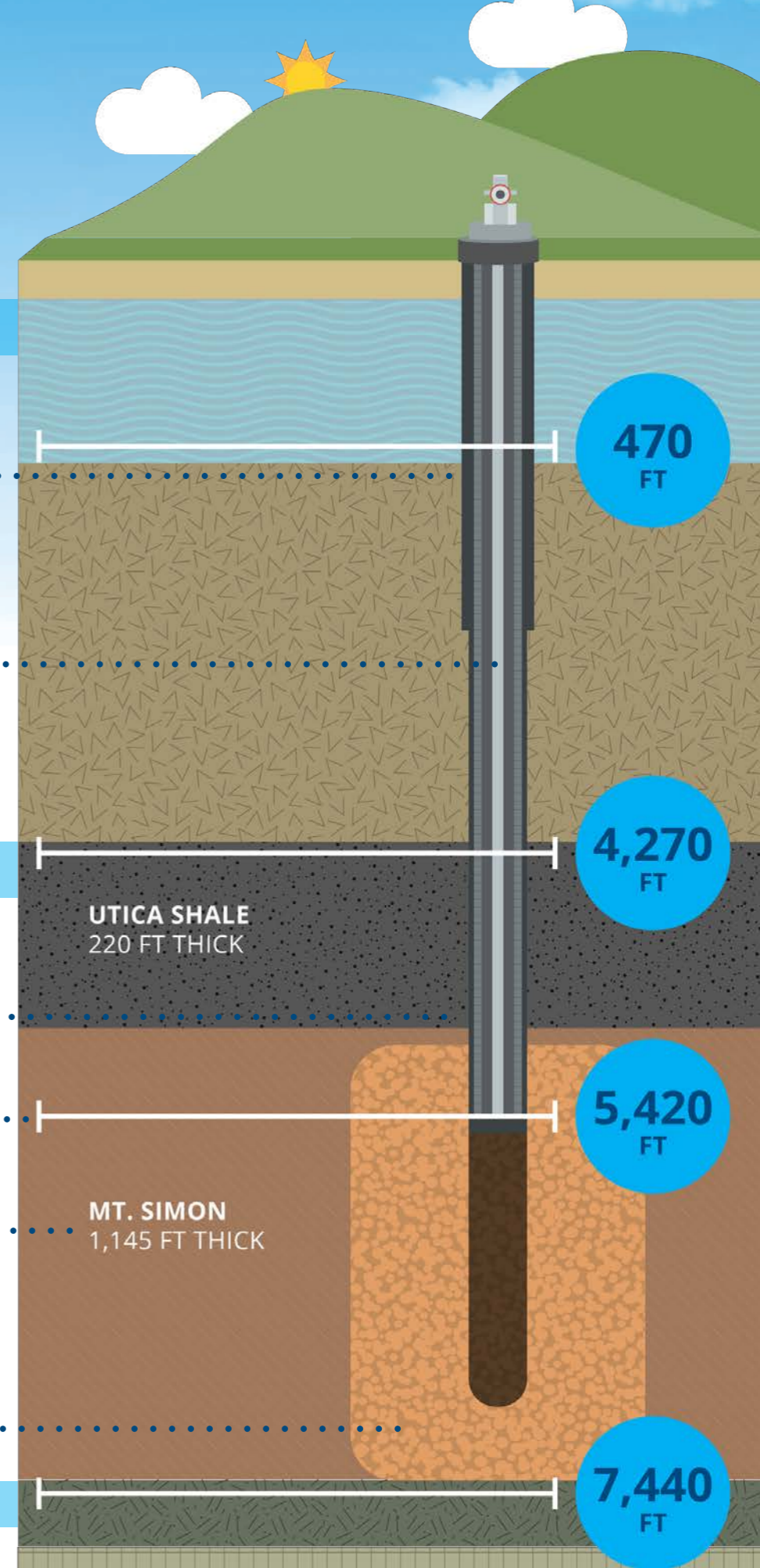
Injection zone begins at 4,490 feet below the surface

Injection interval starts at 5,420 feet below the surface

Mt. Simon extends under Michigan, Ohio, Illinois and Indiana, with over 50 deep wells in operation

Liquids are permanently contained, like natural oil and gas deposits

WELL DEPTH



Project Overview

Responsible operation of two regulated **Class I industrial waste wells** to safely dispose of onsite landfill liquids.



US EPA & State Regulations

- ▶ Siting
- ▶ Construction
- ▶ Operation, monitoring, inspection and testing
- ▶ Record keeping and reporting
- ▶ Closure

Proven Technology

Deepwell injection wells are a safe and environmentally responsible technology.

- ✓ Designed with multiple casings to prevent leakage
- ✓ Continuous monitoring with advanced technology
- ✓ Approximately 800 permitted, active Class I injection wells in the U.S.
- ✓ 22 permitted Class I wells in Michigan
- ✓ Republic operates 14 active injection wells



Environmental Safeguards

Several safeguards are in place to protect the environment, including:

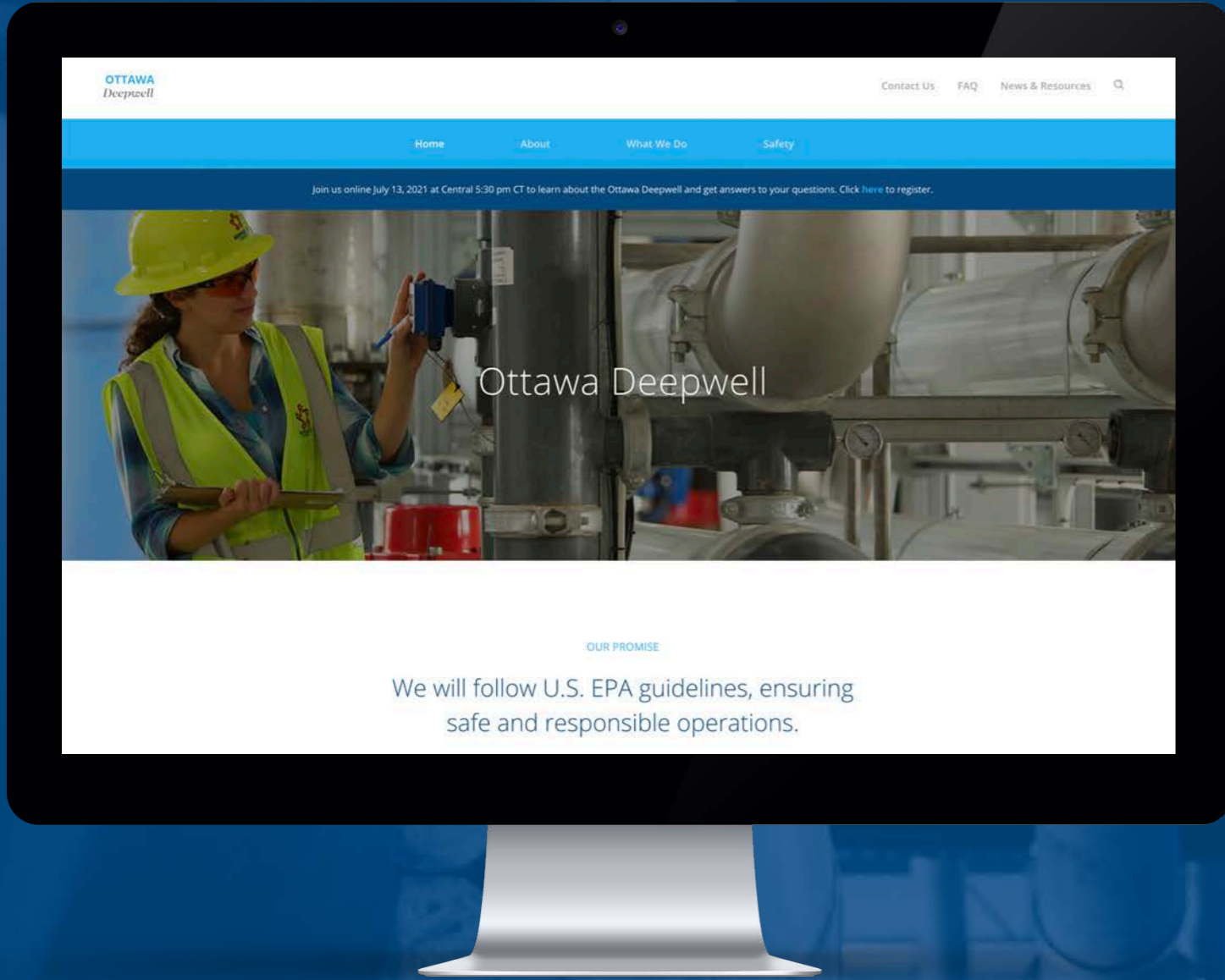
- ✓ Pressurized seals to continuously monitor fluids
- ✓ Regularly scheduled mechanical integrity testing
- ✓ Regular inspections by U.S. EPA



Groundwater Safeguards

- ✓ Siting and construction
- ✓ No impact on groundwater
- ✓ Leveraging best-in-class engineering and technology
- ✓ Liquids will be injected deep – more than half a mile – below the nearest possible drinking water source
- ✓ U.S. EPA has said that Class I deepwells offer *“a particularly strong level of public health protection.”*
- ✓ Continued landfill groundwater monitoring





Public Website

OttawaDeepwell.com

36K

EMPLOYEES

5M

AVERAGE. PICKUPS PER DAY

16K

TRUCKS

One of the largest fleets in the U.S.

20%

OF FLEET POWERED
BY NATURAL GAS

340

HAULING FACILITIES

75

LANDFILL GAS &
RENEWABLE ENERGY
PROJECTS

79

RECYCLING CENTERS

189

ACTIVE, MODERN-DAY
LANDFILLS

14

INJECTION
WELLS

212

TRANSFER STATIONS

99%+

SERVICE
RELIABILITY RATE

75%

REPUBLIC DRIVERS HAVE
WON 75% OF THE
INDUSTRY'S DRIVER OF THE
YEAR AWARDS SINCE 2009

41

STATES

2,400+

MUNICIPAL
CUSTOMERS

130

CLOSED LANDFILLS
MANAGED

1st

IN INDUSTRY TO SET
A SCIENCE-BASED,
GREENHOUSE GAS
EMISSIONS TARGET

39%

BETTER SAFETY
PERFORMANCE THAN THE
INDUSTRY AVERAGE

Based on OSHA recordable rates

AWARDS AND RECOGNITION



WHAT THE EXPERTS ARE SAYING

SAFETY

“EPA and other scientific experts have concluded that these liquid wastes are “removed from the environment” — isolated from the biosphere thousands of feet below the earth’s surface, where they will remain confined for millions of years.” ^a

BENEFITS

EPA declared that underground injection “reduces human exposure to organic and inorganic chemicals and heavy metals by removing them from the environment.” ^a

GROUNDWATER PROTECTIONS

“Because these wells inject waste below the deepest USDW, there is little chance of any negative effects on potentially usable groundwater.” ^b

“EPA has taken a strong protective stand to assure that USDWs are not endangered in the short-term ... or the long term ...” ^d

MINIMIZING RISK

“...a typical Class I non-hazardous well affords the public and the environment an extremely low level of risk” ^c

APPENDIX

^a Removed from the Environment, Robert F. Van Voorhees, The Environmental Law Institute, <https://bit.ly/36CC2Dk>

^b Injection Wells: An Introduction to Their Use, Operation & Regulation, Groundwater Protection Council, <https://bit.ly/2UuB6vc>

^c Class I Underground Injection Control Program: Study of the Risks Associated with Class I Underground Injection Wells, U.S. EPA, <https://bit.ly/32MHPVB>

^d Class I Deepwell Injection Technology: A safe and proven liquid waste management option, Petrotek Engineering Corporation, <https://bit.ly/35zn4P4>