How Can Analytics Play a Bigger Role in EHS?



Speakers



Courtney WilsonSenior Sales Engineer



Ryan JanochCo-Founder of Mapistry

OO Today's Topics **OO**

- **Foundation:** Getting the data into one place
- **☑** Basic Compliance: Inspection Completion Rates & Gap Analysis
- Accountability & Training: Corrective Action & Task Intelligence
- ✓ Compliance Assurance: Operator Level Logging
- ✓ Trends & Outliers: Water Sampling Data Sets

The problem



Non-Compliance is Costly

- Lawsuits cost millions
- Shareholders care about ESG
- Customers abandon unsustainable companies



Data is Siloed

- Leadership & EHS are in the dark
- EHS is forced to be reactive rather than proactive
- Time is wasted on manual data collection processes



Resources are Limited

- Minimal EHS staff
- Operations & production take priority over EHS
- Regulatory changes are outpacing EHS staff bandwidth



Compliance failures are costly

Formosa Plastics set to pay \$50 million in pellet pollution

how off as I

DuPont, Chemours, Corteva to pay Delaware millions over damage from



PFAS or 'forever chemicals'

Wal-Mart Fined \$110 Million Over Hazardous Waste The world's largest retailer pleads guilty to dumping hazardous chemicals in city trash bins and sewer systems. MAY 28, 2013

MICHIGAN

State, townships near \$69.5M settlement with Wolverine shoe maker over PFAS contamination





Attorney General Becerra Announces \$11 Million Settlement against AutoZone for Illegal Disposal of Hazardous Waste Statewide

\$1.98 charged in **Environmenta** My grandmother with attoms

It's the largest settlement for a Clean Water Act lawsuit filed by private citizens in the history of the United

in 2021¹ (US EPA & local enforcement only, doesn't include legal fees or private litigation, which likely dwarfs. this number.)

LyondellBasell companies agree to pay \$3.4M fine after feds allege illegal air pollution



Indiana cement plant to pay millions in fines, upgrades over alleged Clean Air Act violations



Facilities

March 9, 2020 10:45 AM, EDT

Eric Miller I Senior Reporter

News Releases from Region 09

violations

EPA Proposes Tougher Rules to Monitor Runoff at Transportation

U.S. EPA fines three Southern California-based companies \$170,000 for hazardous waste



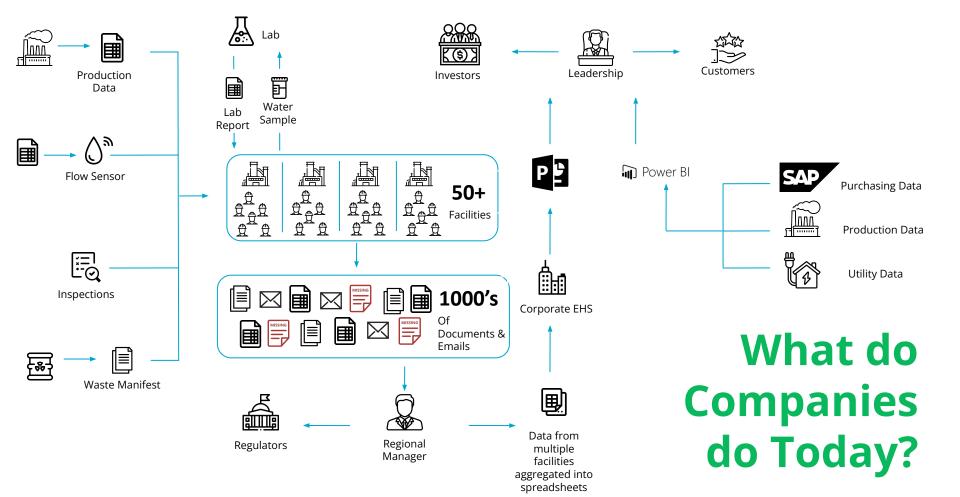
Potential Penalty Costs...



Internal costs on consultants & attorneys are typically 2X the external cost

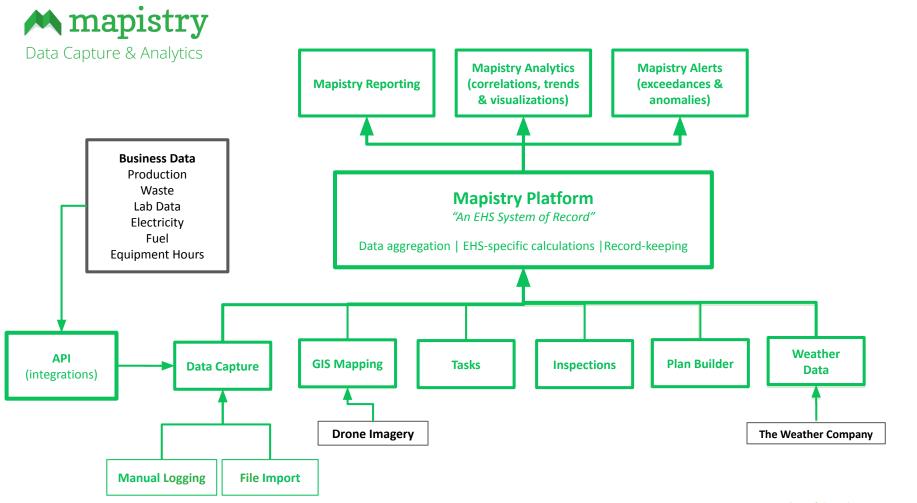
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A Business Intelligence Platform for Industrial EHS Teams



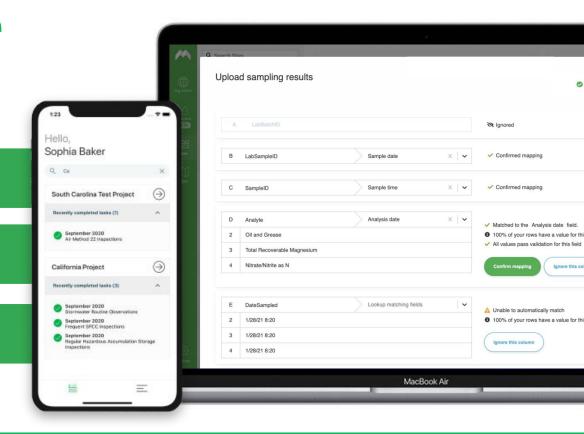
HOW IT WORKS

Data Capture

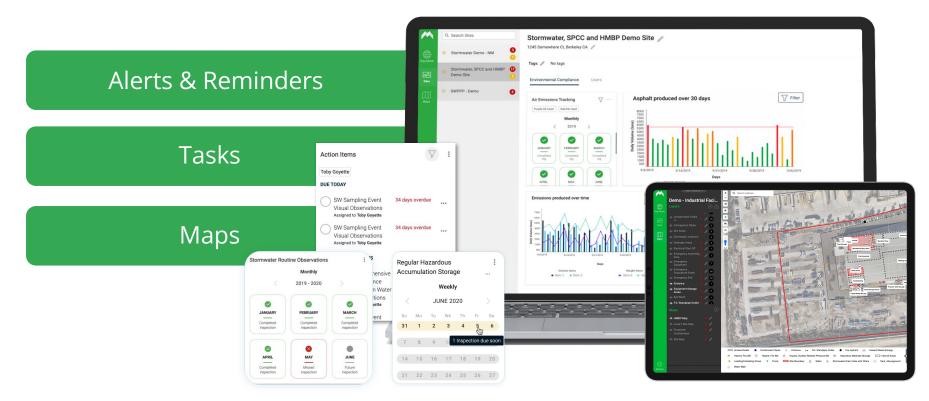
Mobile App

Easy File Import

API



Communicate



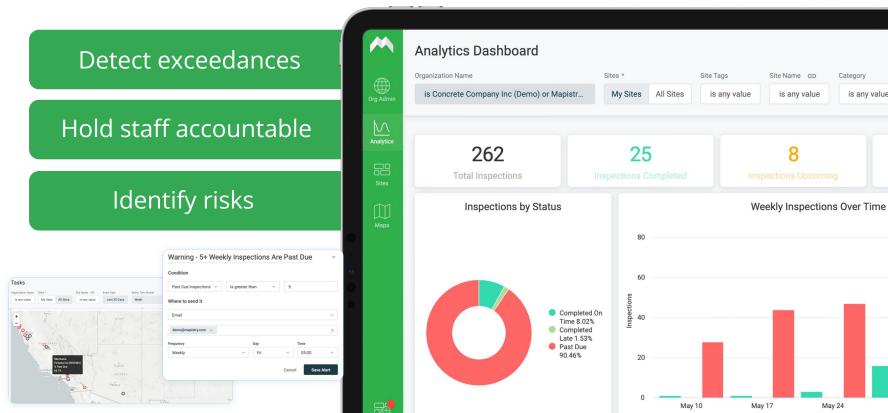
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Due Date

May 31

Last 30

Analyze



Scenarios & Solutions

How we solve the problems facing EHS teams

Data Collection Problems

- **▼** Too Much Work: Manual data entry into spreadsheets
- Missing Data: Operators forget to log data
- No Access: Paper records are kept at a facility
- ✓ Opportunity Cost: EHS Managers don't have time for high value activities (training & problem solving)
- ▼ Entry Errors: Manual entry results in transcription errors

Goal is Compliance with Inspection Requirement & On Time

Regional EHS Manager: How can I see how my region is performing?

National Director: How can which region is underperforming?

Goal is Creating Tasks to Avoid Future Issues (Proactive Corrective Actions)

Regional EHS Manager: Can I see who is pencil whipping forms?

National Director: How can I reward high performing managers?

How can I identify opportunities for follow-up training on the inspection process?

Goal is Daily Logging for Air Permit Compliance

Site EHS Manager: Can I find the gaps in my data?

National Director: What sites should I be worried about during an audit or regulatory inspection?

Goal is Water Permit Compliance & Lawsuit Avoidance

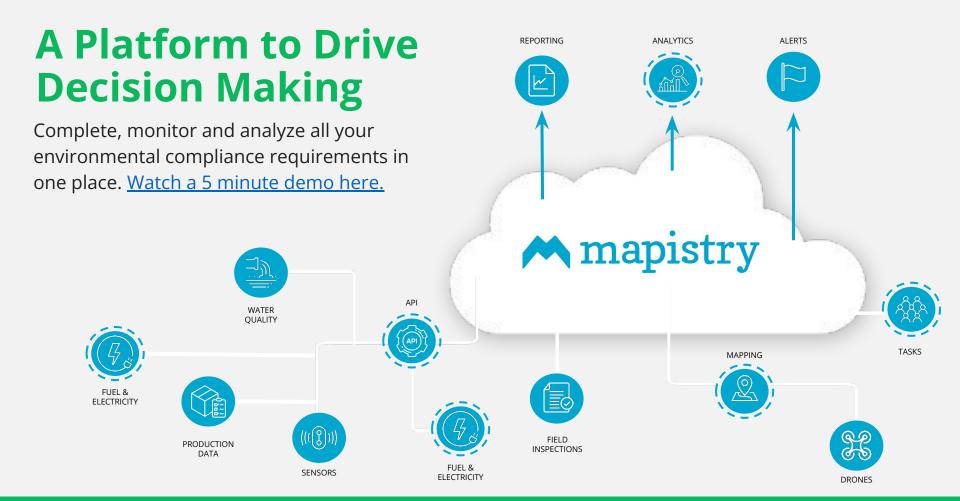
Site EHS Manager: What treatment systems are underperforming?

National Director: What sites should I be worried about getting sued?

Where should I make capital improvements?



A Business Intelligence Platform for Industrial EHS Teams



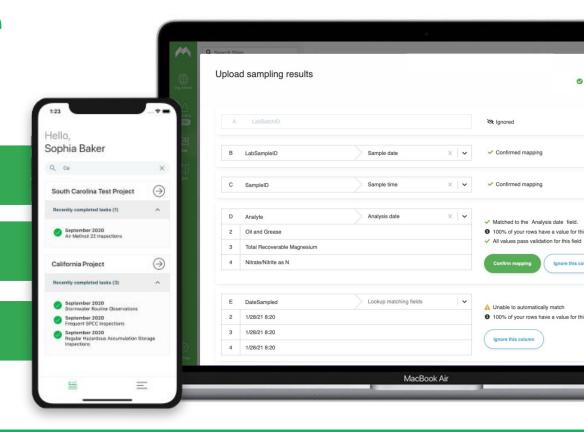
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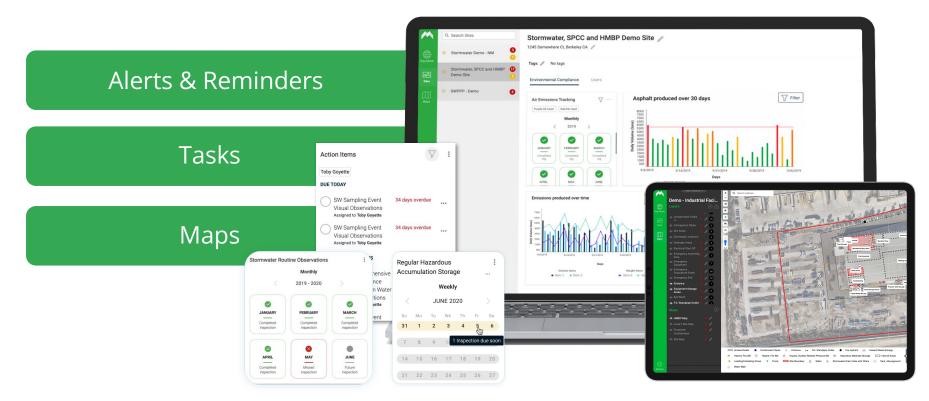
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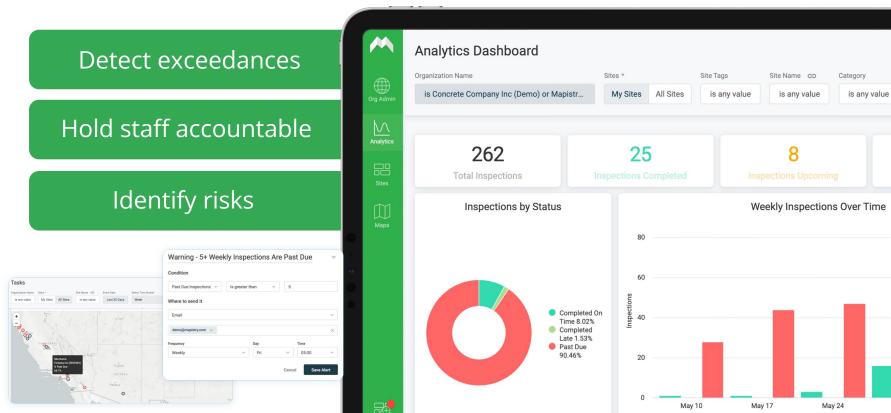


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Customer's **Showing Their**



"Love the charts. Love the drilldowns. Really good job with this one guys!"

- Business Program Manager **Digital Transformation, Paper & Forest Products**

"A Very Helpful Program, Supported By A Very Helpful Group Of People. 10/10 I Would Recommend." - Devin B.

"lust awesome!"

- Maintenance Manager, **Transit Company**

"Mapistry takes the guesswork out of things and allows us to focus on getting concrete to customers"

- Robert McGehee, Director of **Environment & Land, Lafarge Holcim**

You really just made my day." - Director of Environmental. **Transportation Company**

"The Mapistry team is the best!

Responsive, creative, open-minded, very

forward-thinking, smart, professional

"OMG Ryan, this is amazing!

"Awesome company" excellent services to make my job so much easier ... the regulators are thrilled to know everything is located in one location that simply accessible at any time."

- Jerry Bailey, EHS Manager, Apex Logistics

"Our Mapistry team (because you're all OURS now! (2) is the best in the business and we really do love to tell people that",

- Sonya Price, Area Safety Manager **MMC Materials**

"Best of the best for 21st Century compliance!"

- Regional Environmental **Engineer, Global Retail & Transportation Company**

and overall a pleasure to deal with." - Director of EHS, Precast Company

"You're digital heroes!"

- Business Group Manager in **Wood & Fiber Products**

"What Would We Do Without Mapistry?"

- Becky H.

Questions?

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