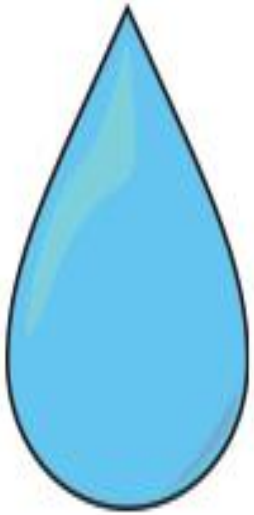
OTCO Class III and IV Workshop

August 11, 2021

Andrew Barienbrock

Ohio Environmental Protection Agency



THANKFUL

FOR PROFESSIONAL WATER AND WASTEWATER OPERATORS

THE UNSUNG HEROES PROTECTING THE ENVIRONMENT AND KEEPING YOUR WATER CLEAN AND SAFE 24/7!

#NOTALLHEROESWEARCAPES

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Operations, Resiliency, and Certification Section

Andrew Barienbrock	**Environmental Manager**	
Maria Lucente	Environmental Specialist 3	Developing Inspector Training, District Oversight, Reclassifications, Technical Assistance, Emergency Response and Sanitary Survey Auditing
Carrie Winger	Environmental Specialist 2	Operator of Record notifications, Technical Assistance, Sanitary Survey Auditing
Vacant	Environmental Specialist 2	Security, Contingency Planning, Emergency Response Planning, Operator Notifications and Enforcement
Kevin Swiadek	***Environmental Supervisor***	***Operator Certification***
Vacant	Environmental Specialist 2	Contact Hours, Advisory Council, eBusiness and application processing
Colt Bush	Environmental Specialist 2	Contact Hours, eBusiness, ACHTP Program, and application processing
Deidra Davis	Administrative Professional 2	Operator Certification, Exams

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Security

- Heightened awareness of water and wastewater plant security.
- Increased attacks on America's infrastructure
- Resources:
  - Implementing a cybersecurity program
  - Updates on vulnerabilities and reporting attacks
  - What to do if you are attacked

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Free Cybersecurity Assessment and Technical Assistance

Cybersecurity is a broad term that refers to the security of computer network infrastructure and data. A cyber attack is an attempt to undermine or compromise the function of a computer network or system, or an attempt to track the online movements of individuals without their permission.

What is the assessment and technical assistance?

With the U.S. Environmental Protection Agency, Horsley Witten Group (HWG) is offering free, confidential, cybersecurity assessments and technical assistance to interested water and wastewater utilities. The assessment consists of a questionnaire completed with HWG staff, and the technical assistance consists of developing a cyber action plan based on the results of your utility's assessment focused on best practices to prepare for, respond to, and recover from a cyber incident. Adoption of these practices can reduce the likelihood that a cyber attack will be successful and allow the utility to recover from any cyber attacks faster and at a lower cost. Due to the COVID-19 pandemic, HWG is offering this assessment and technical assistance virtually.

What are the expected outcomes?

All individual utility information gathered during the assessment will be protected and remain confidential. Trends in the anonymized, aggregated data will be shared with other utilities and agencies so that lessons learned from the assessments may benefit all.

Participating utilities can expect to receive a straightforward overview of their vulnerabilities and suggested best practices to reduce risks to their business enterprise, SCADA, and communications systems. Additionally, the utility will develop their cyber action plan with HWG and work to implement any recommended best practices.

What does the utility need to prepare before the assessment and technical assistance?

The assessment will require input from management, IT, operations/control staff and engineers as appropriate. The utility will also need to compile and provide any existing system documentation/diagrams, policies, and procedures.

Is there any follow-up?

Yes, HWG will contact the utility on two separate occasions after the development of the cyber action plan to gauge progress and see if additional assistance is required.

How does my utility participate?

To date, we have worked with over 100 utilities across the United States providing free cybersecurity technical assistance. EPA plans to expand the program as resources allow. We are continuing to register interested utilities at the link below. If you would like more information about the program, contact Gemma Kite at *gkite@horsleywitten.com*, or (508) 833-6600.

To register your utility, please visit:
www.horsleywitten.com/cybersecurityutilities

Horsley Witten Group
Sustainable Environmental Solutions
horsleywitten.com

EPA

U.S. EPA offers free, confidential, Cybersecurity Assessments and Technical Assistance for interested Water and Wastewater Utilities

To register your utility, please visit:
www.horsleywitten.com/cybersecurityutilities

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U.S. EPA CYBERSECURITY VIRTUAL WORKSHOP

INTRODUCTION TO CYBERSECURITY VIRTUAL WORKSHOP

Sponsored by: U.S. Environmental Protection Agency

Cyber-attacks are striking critical infrastructure across the United States, including water and wastewater systems, with increasing frequency. Recent cyber-attacks on water and wastewater systems have manipulated treatment processes, disabled process control and business enterprise systems, and stolen proprietary data. Cybersecurity best practices and incident response planning can prevent or mitigate many of these attacks and are essential to the sound operation and management of water and wastewater systems.

The U.S. EPA is sponsoring a series of free virtual workshops on water sector cybersecurity. These workshops consist of two half-days. The first day will give water and wastewater systems current information on cyber threats and risk drivers, resources to bolster cybersecurity, and key findings from cyber vulnerability assessments of water and wastewater systems. The second day will lead participants through incident response exercises for cyber-attacks on water and wastewater systems. The overall goal is for participants to identify planning and procedural actions that enhance cybersecurity and mitigate risk in their systems.

The U.S. EPA is offering three different opportunities to participate in this workshop. Workshop participation is open to water and wastewater systems, government officials, and others involved in water sector cybersecurity. Continuing education credits have been applied for in all 50 states. Participants must attend both days in full to receive the credits.

*Workshop dates and registration links are listed on the right. For more information or questions regarding workshop registration, please contact: **Sarah Bartlett** at sbartlett@horsleywitten.com*

Booz | Allen | Hamilton®

WORKSHOP DATES, TIMES, AND REGISTRATION LINKS:

SEPTEMBER 15TH
(1:00-4:30 PM EST)
&
SEPTEMBER 16TH
(1:00-5:00 PM EST)
REGISTRATION LINK:
https://us02web.zoom.us/meeting/register/tZYlceGoqzMrG9cnle7r5-dGWrCCY7hwa1rA

OCTOBER 13TH
(1:00-4:30 PM EST)
&
OCTOBER 14TH
(1:00-5:00 PM EST)
REGISTRATION LINK:
https://us02web.zoom.us/meeting/register/tZIuf-isrj0iHNwVAmh_ovAPmR6aXnMul4Tp

NOVEMBER 3RD
(1:00-4:30 PM EST)
&
NOVEMBER 4TH
(1:00-5:00 PM EST)
REGISTRATION LINK:
https://us02web.zoom.us/meeting/register/tZctcu2srTwpE90p1Fexz7JZmZF-vJO5jX4F

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WATER UTILITIES

Please follow the steps outlined below to protect your organization from ransomware attacks.
Additionally, if you suspect that you organization is the victim of a ransomware attack, please contact CISA (central@cisa.dhs.gov) or local law enforcement.

In response to the pervasive ransomware threat, Anne Neuberger, Deputy Assistant to the President and Deputy National Security Advisor for Cyber and Emerging Technology, issued a memo, *What We Urge You to Do to Protect Against the Threat of Ransomware*, in which she outlines five best cybersecurity practices. The U.S. EPA Office of Water urges all water and wastewater facilities to adopt these basic practices to reduce the risk of a successful ransomware attack:

1. **Backup your data, system images, and configurations, regularly test them, and keep the backups offline:** Ensure that backups are regularly tested and that they are not connected to the business network, as many ransomware variants try to find and encrypt or delete accessible backups. Maintaining current backups offline is critical because if your network data is encrypted with ransomware, your organization can restore systems.

2. **Update and patch systems promptly**: This includes maintaining the security of operating systems, applications, and firmware, in a timely manner. Consider using a centralized patch management system; use a risk-based assessment strategy to drive your patch management program.

3. **Test your incident response plan**: There's nothing that shows the gaps in plans more than testing them. Run through some core questions and use those to build an incident response plan: Are you able to sustain business operations without access to certain systems? For how long? Would you turn off your manufacturing operations if business systems such as billing were offline?

4. **Check Your Security Team's Work**: Use a 3rd party (CISA will do this for free) to test the security of your systems and your ability to defend against a sophisticated attack. Many ransomware criminals are aggressive and sophisticated and will find the equivalent of unlocked doors.

5. **Segment your networks**: There's been a recent shift in ransomware attacks – from stealing data to disrupting operations. It's critically important that your corporate business functions and manufacturing/production operations are separated and that you carefully filter and limit internet access to operational networks, identify links between these networks and develop workarounds or manual controls to ensure industrial control networks can be isolated and continue operating if your corporate network is compromised. Regularly test contingency plans such as manual controls so that critical functions can be maintained during a cyber incident.

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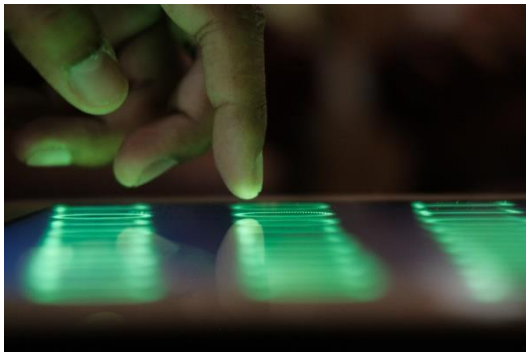
RESOURCES AVAILABLE:



https://www.cisa.gov/stopransomware

https://www.epa.gov/waterriskassessment/epa-cybersecurity-best-practices-water-sectorhttps://www.epa.gov/waterriskassessment/epa-cybersecurity-best-practices-water-sector

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2021 Renewals

- The renewal button is active. Click the blue renew button to the right of your certificate
- Renewals due November 30 , 2021
- Certificates expire on December 31, 2021

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2021 Paper and Pencil Exams

- December 7, 2021
- Exam applications due by September 8, 2021
- 2 exam sessions
  - Water 9:00 - 12:00
  - Wastewater 13:30 – 16:30
  - Doors for each session will open 30 minutes before the exam starts
- COVID safety protocols which may include wearing a mask will be emailed shortly before the exam.

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eBusiness Center

- New login process (11/6/2020)
  - OH|ID
  - Must use Microsoft Edge or Google Chrome
- All ebiz users received an email with directions in November of 2020
- Video
- Written instructions

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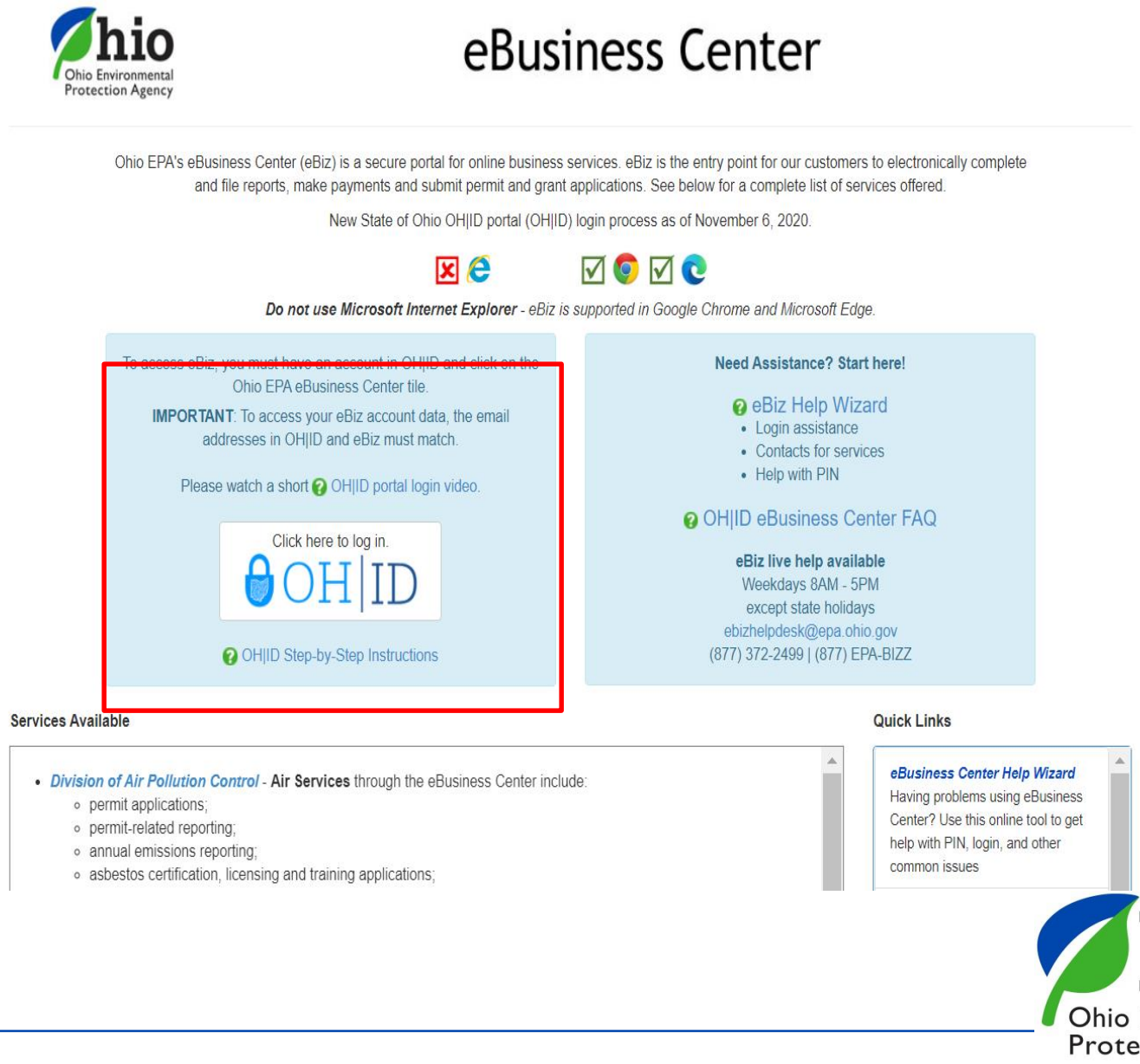

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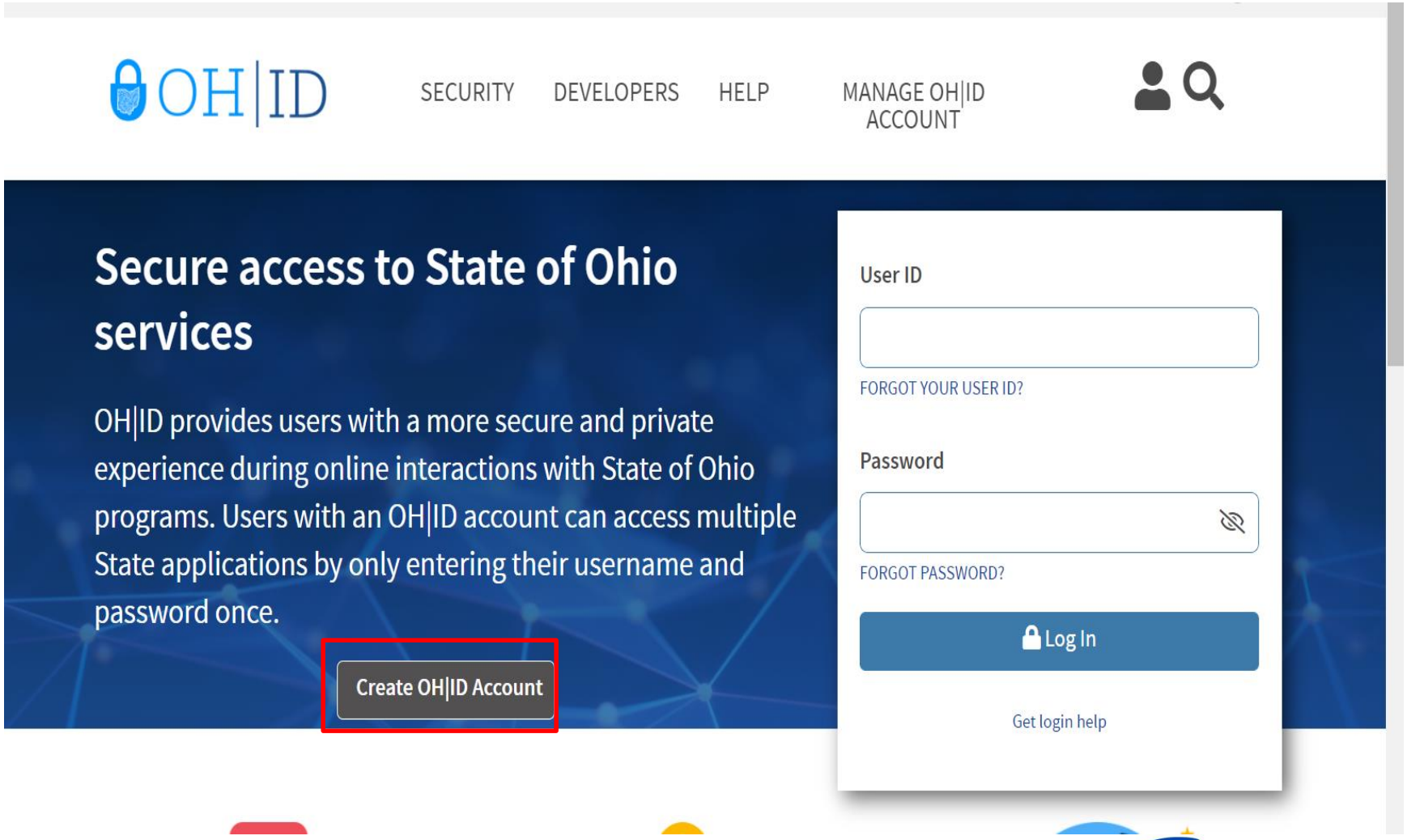

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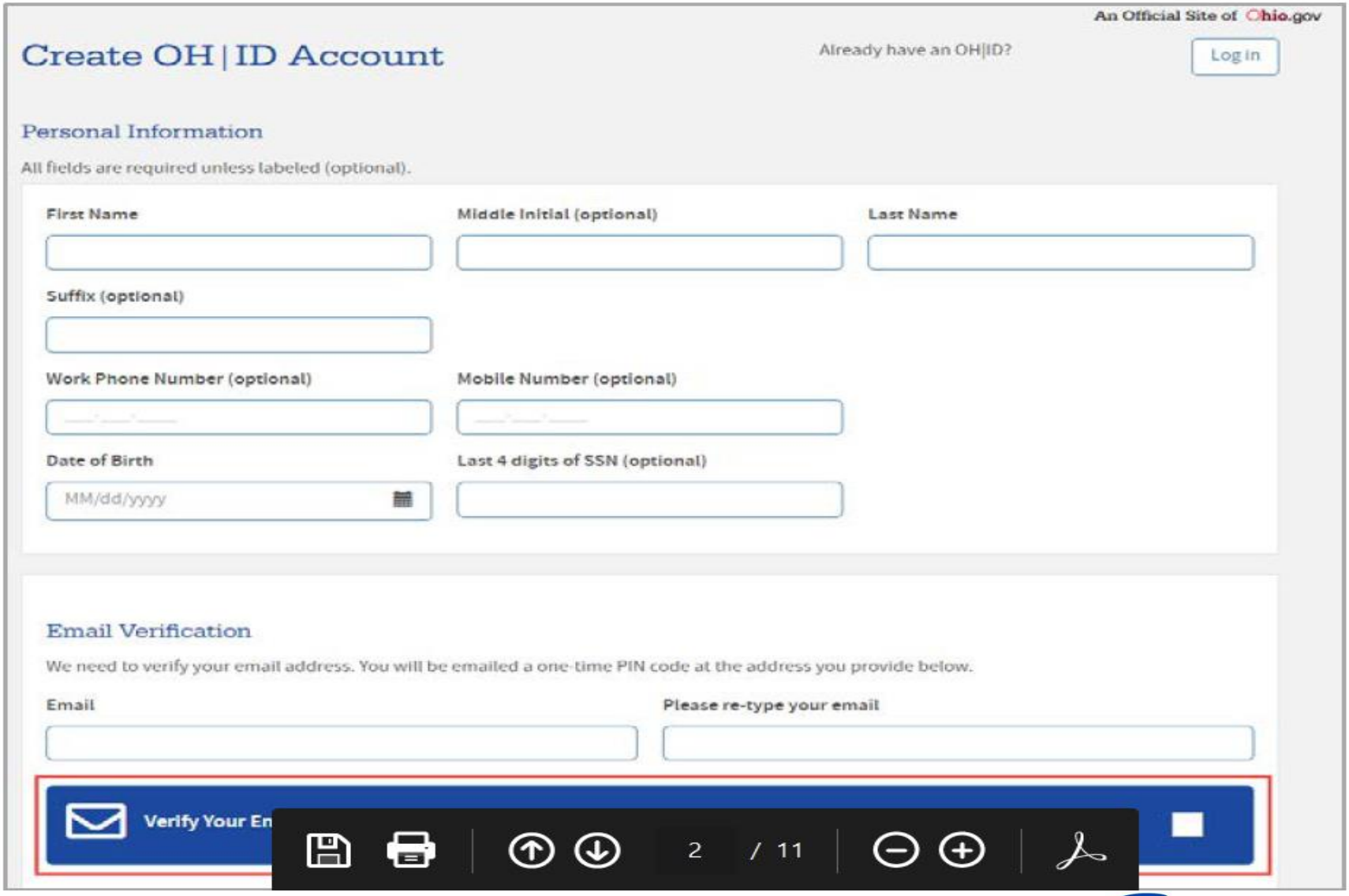

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Profile Information

Username Guidelines:

- Must have at least 6 and no more than 64 characters in length
- Username cannot start or end in a special character
- Username cannot contain only numbers
- The following are valid characters that can be used in an OH|ID username:
  - Upper case letters (A-Z)
  - Lower case letter (a-z)
  - Numbers (0-9)
  - Select special characters (. _ - @) Note: No other special characters are permitted

Pick a User ID

Ohio Environmental Protection Agency

Password Guidelines:

- Must have at least 8 and no more than 30 characters in length
- Must contain 1 character from each of the following categories:
  - Upper case letters (A-Z)
  - Lower case letter (a-z)
  - Numbers (0-9)
  - Special characters (!$#.,%@~^&*_-+=><(){}[]%'";:\/?')
- Cannot include your first name, last name, username, or OH|ID
  - Example: If your name or username is John Smith, your password cannot contain "John" or "Smith"

Password

Confirm Password

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Terms and Conditions

In order to proceed with this request, you must agree to the following terms and conditions.

By clicking "I Agree" and creating an OH|ID Citizen, Business, or Workforce profile you consent to use electronic signatures with the State of Ohio and receive communications in electronic form.

If you use this site, you are responsible for maintaining the confidentiality of your OH|ID account(s) and password(s) and for restricting access to your computer, and you agree to accept responsibility for all activities that occur under your OH|ID account(s) or password(s). The Ohio Department of Administrative Services reserves the right to refuse service, terminate accounts, remove or edit content, or cancel transactions.

☐ I agree to the terms and conditions

Verification Question

Bee, chin, ankle, leg and dog: how many body parts in the list?

Cancel

Create Account

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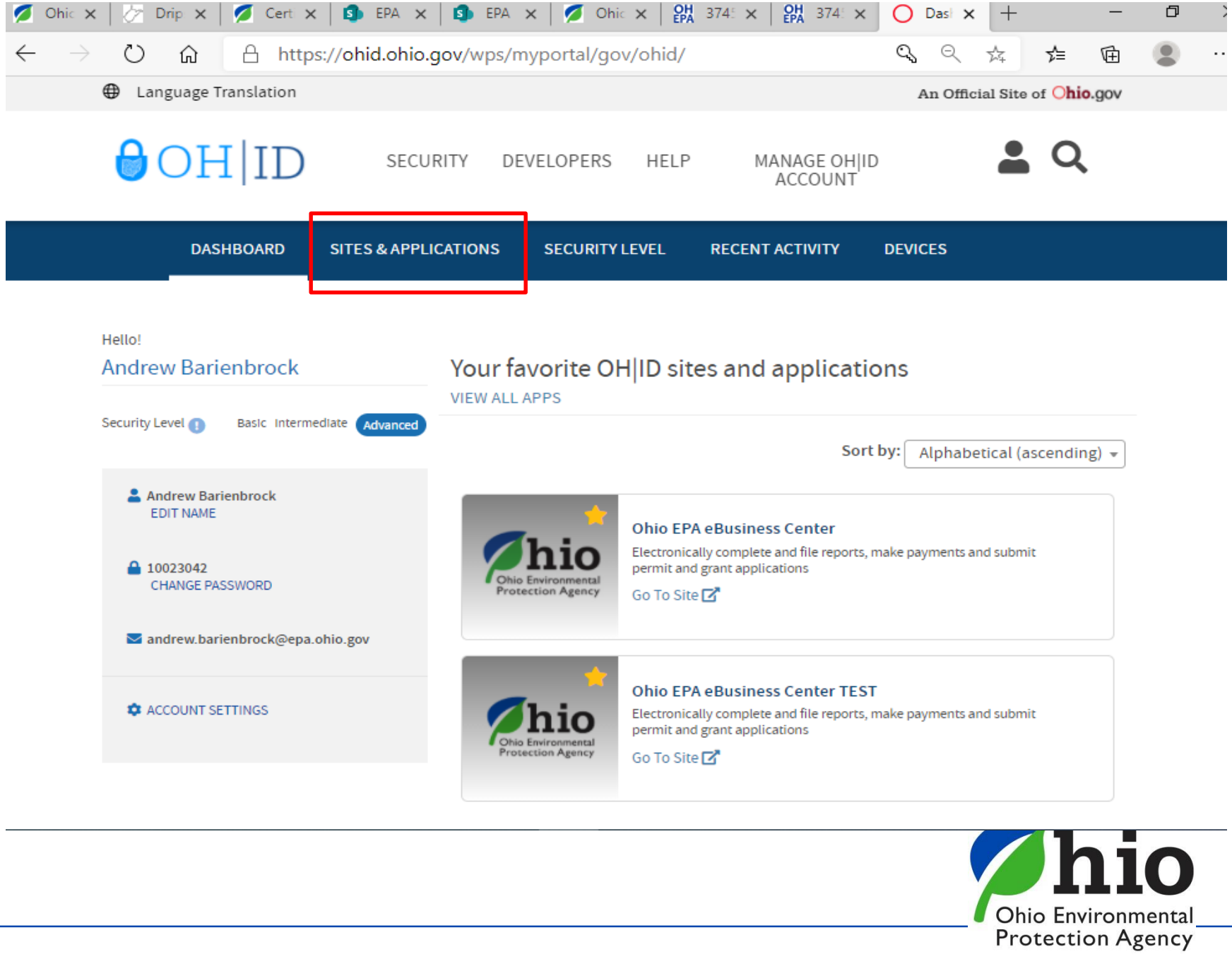

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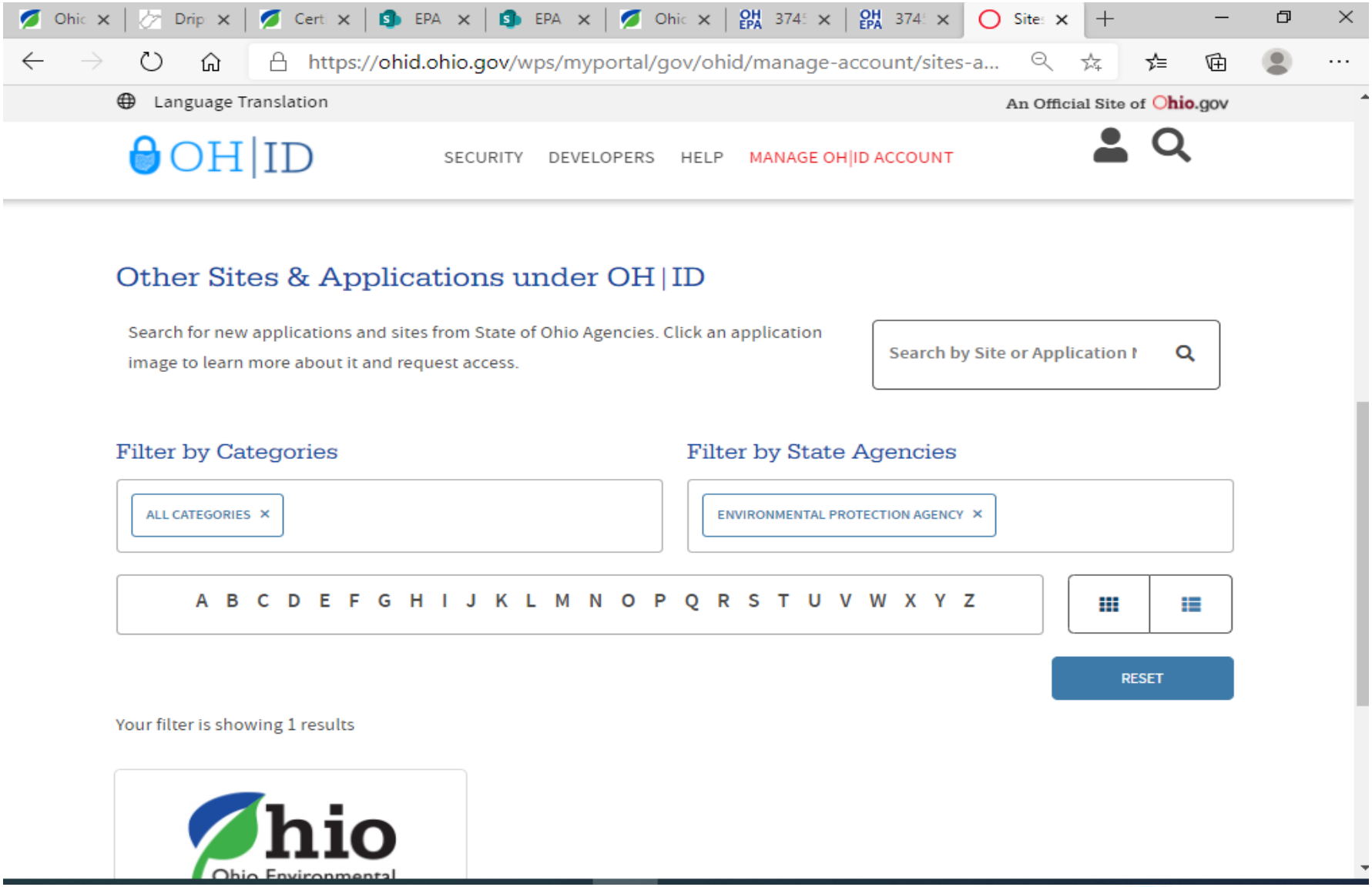

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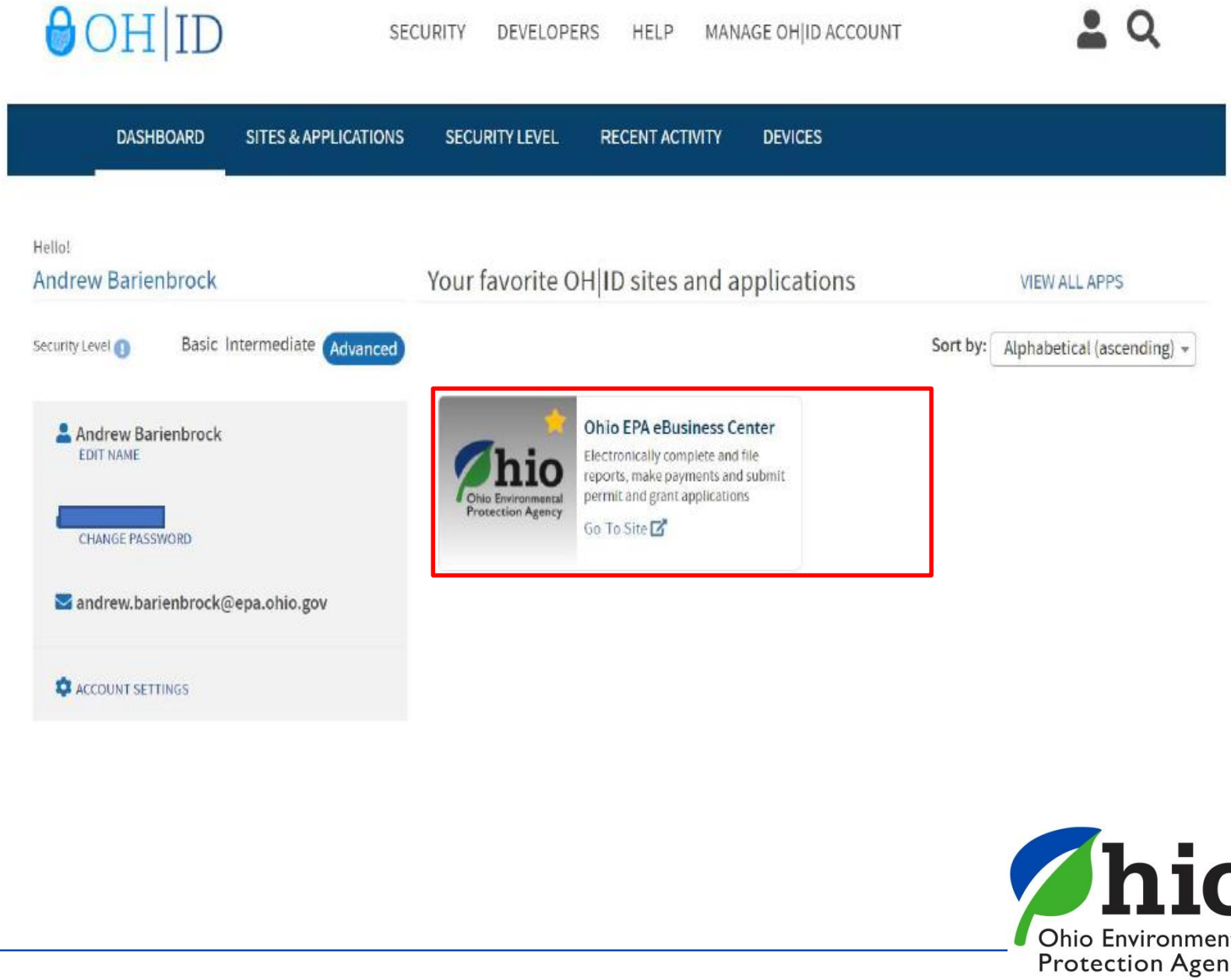
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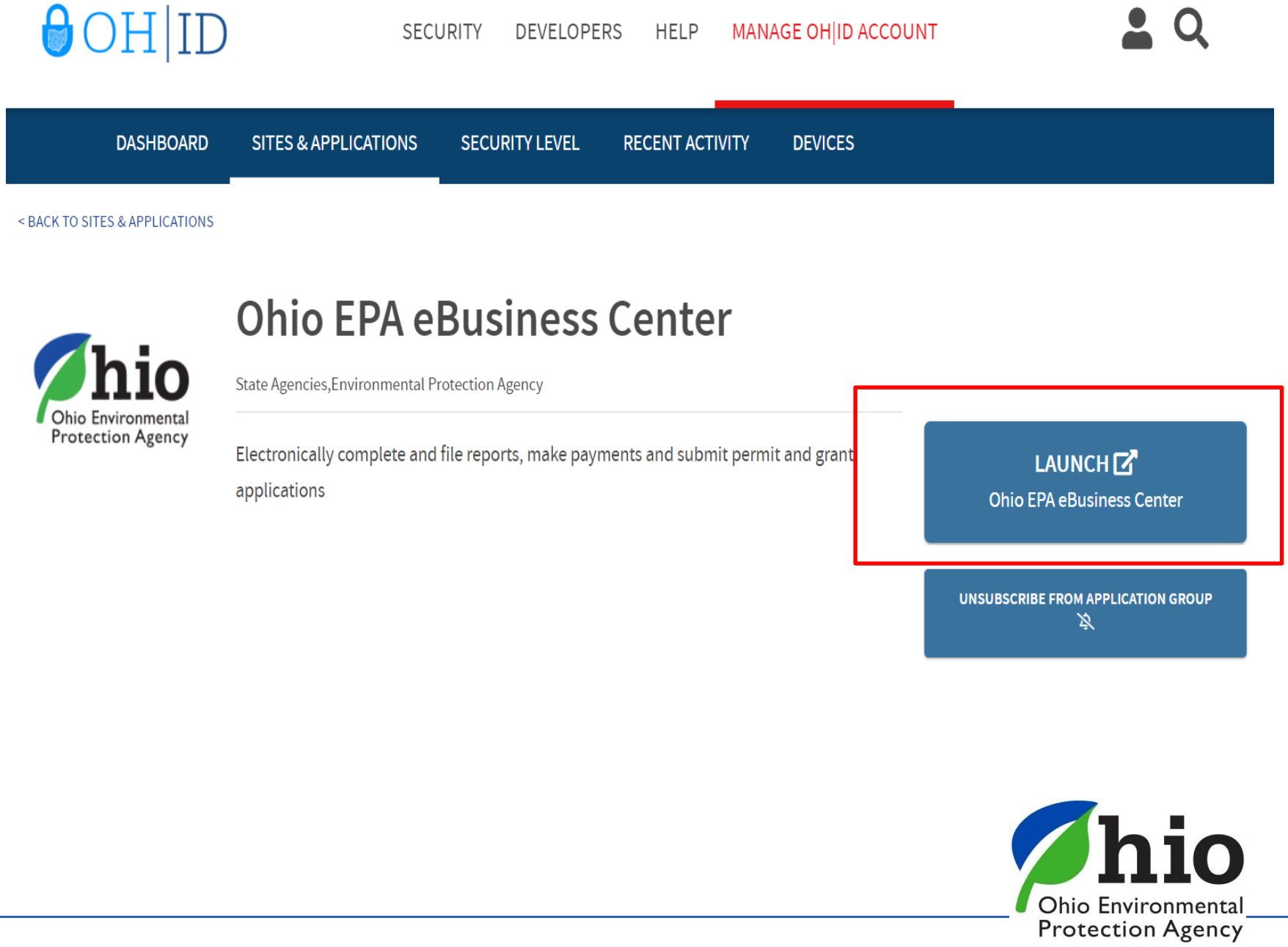
SECURITY
DEVELOPERS
HELP
MANAGE OH|ID ACCOUNT
DASHBOARD
SITES & APPLICATIONS
SECURITY LEVEL
RECENT ACTIVITY
DEVICES
Hello!
Andrew Barienbrock
Your favorite OH|ID sites and applications
VIEW ALL APPS
Security Level
Basic
Intermediate
Advanced
Sort by:
Alphabetical (ascending)
Andrew Barienbrock
EDIT NAME
CHANGE PASSWORD
andrew.barienbrock@epa.ohio.gov
ACCOUNT SETTINGS
Ohio EPA eBusiness Center
Electronically complete and file reports, make payments and submit permit and grant applications
Go To Site
Ohio Environmental Protection Agency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DEVICES
< BACK TO SITES & APPLICATIONS
Ohio Environmental Protection Agency
Ohio EPA eBusiness Center
State Agencies,Environmental Protection Agency
Electronically complete and file reports, make payments and submit permit and grant applications
LAUNCH
Ohio EPA eBusiness Center
UNSUBSCRIBE FROM APPLICATION GROUP
Ohio Environmental Protection Agency

Account Information

Associated Accounts

The eBusiness Center (eBiz) account(s) listed below have the same primary email address as your account in OH|ID. To use or deactivate an account, you must provide the eBiz password.

Please choose an action for an account to proceed:

Use this account: Select this option to proceed to the eBiz home page using the selected account's privileges and associations. If only one account is listed, you will not see this screen again and will go directly to the eBiz home screen after logging into OH|ID. If you have more than one associated account, you will see this screen each time you navigate to eBiz.

Deactivate: If you have more than one associated account, you may deactivate any that are no longer in use. Please consider the following:

- We **strongly** advise that you review the account's service permissions and account history before you deactivate it. You can do so using the "use this account" action described above.
- You will no longer have access to any account history or data associated with the account once it is deactivated.

If you do not see your account listed, OR you see an account that you do not think is yours, please contact us.

Need help? eBusiness Center Help Desk: (877) 372-2499 | ebizhelpdesk@epa.ohio.gov

eBusiness Center User ID	Account Holder	Actions
abarienb	Andrew BARIENBROCK	Actions
TP410350	Andy Barienbrock	

Use this account

Deactivate

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OHID Tips

- Email address for your OHID must be the same as the email address for your ebiz account or you will not be able to link to your certificate.
- Highly recommend you use a personal email address and not a work email.

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Minimum Staffing Reporting

- New reporting app is available.
- Must begin using for the July minimum staffing report.

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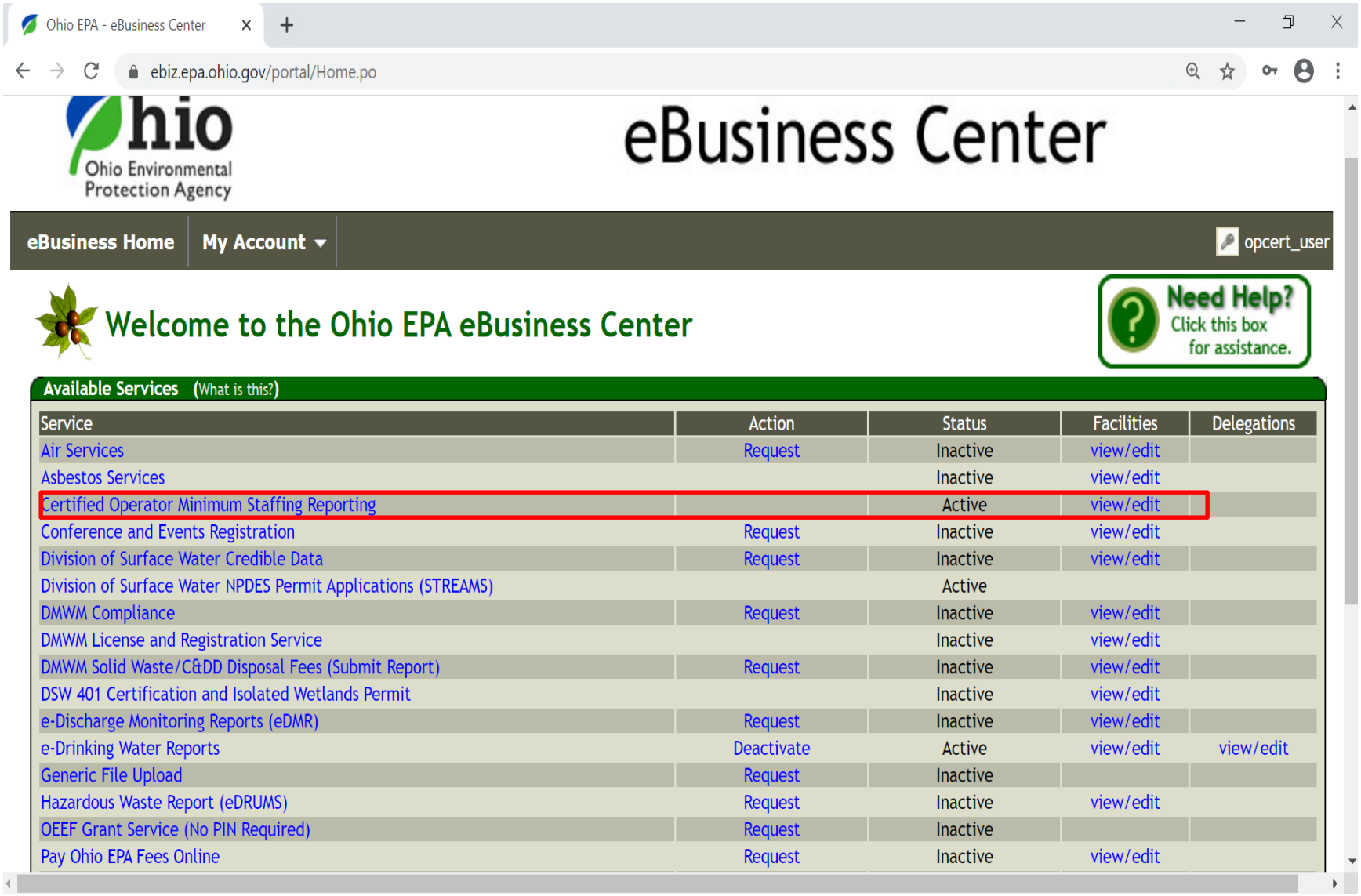

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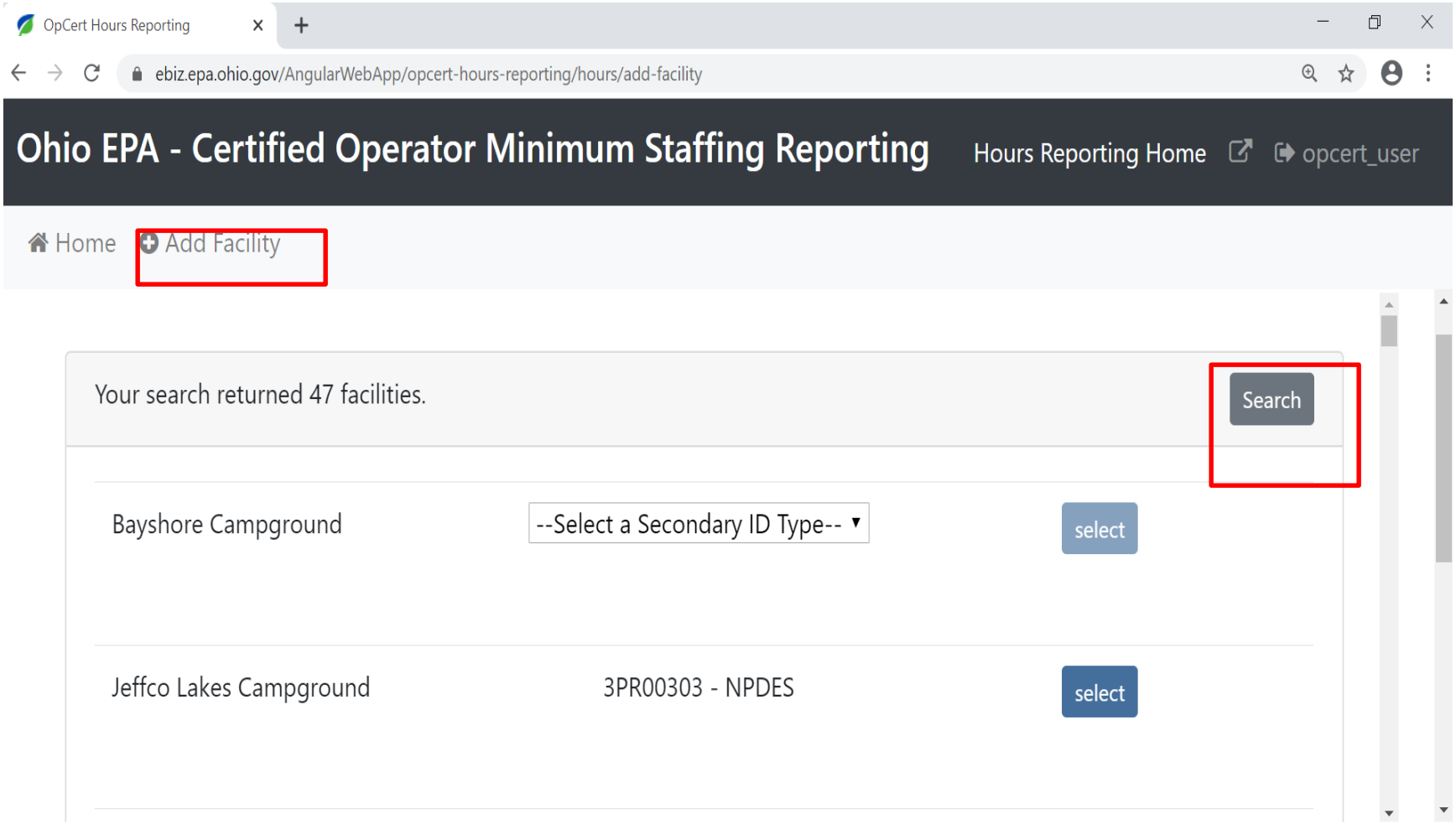

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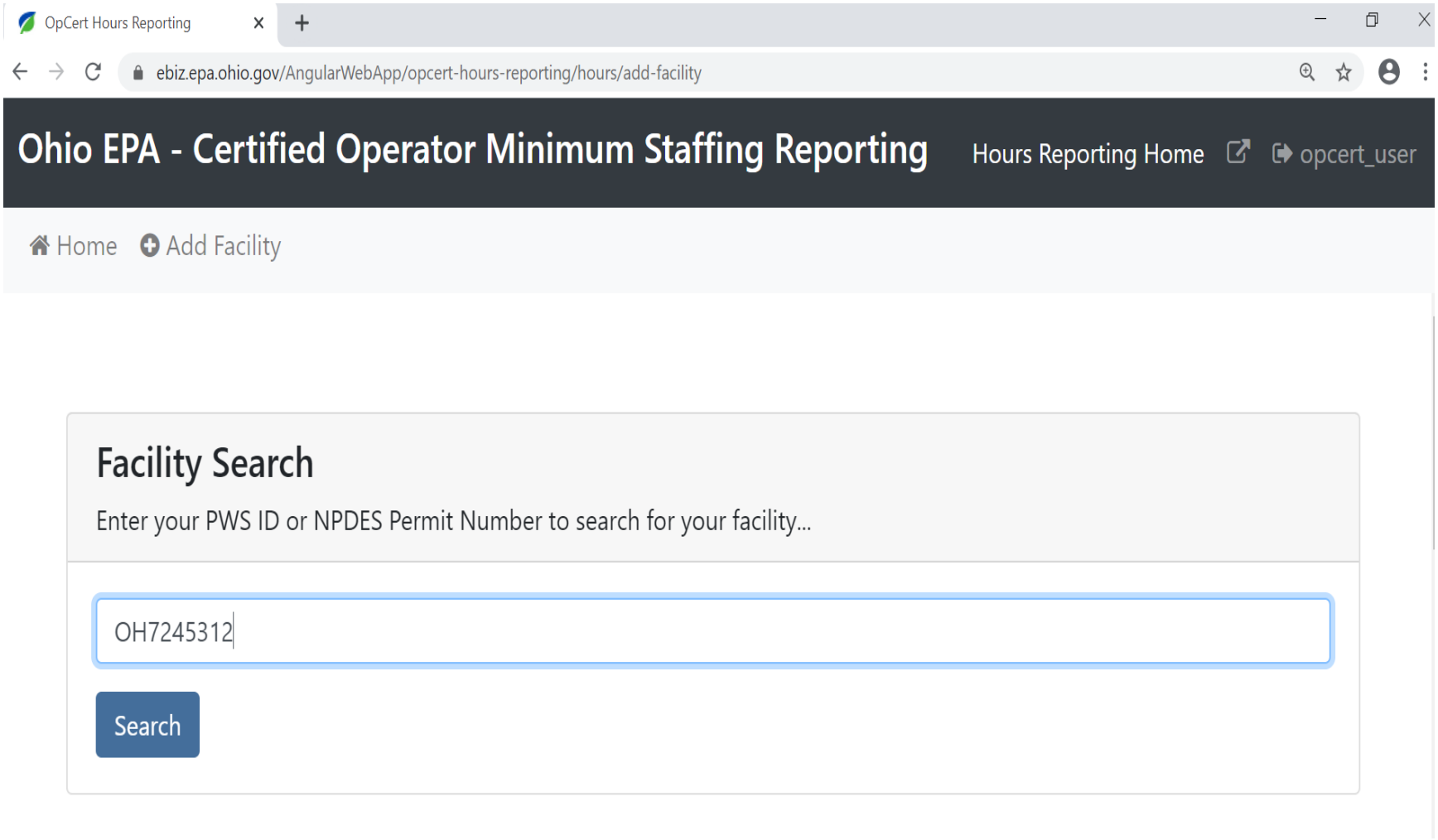

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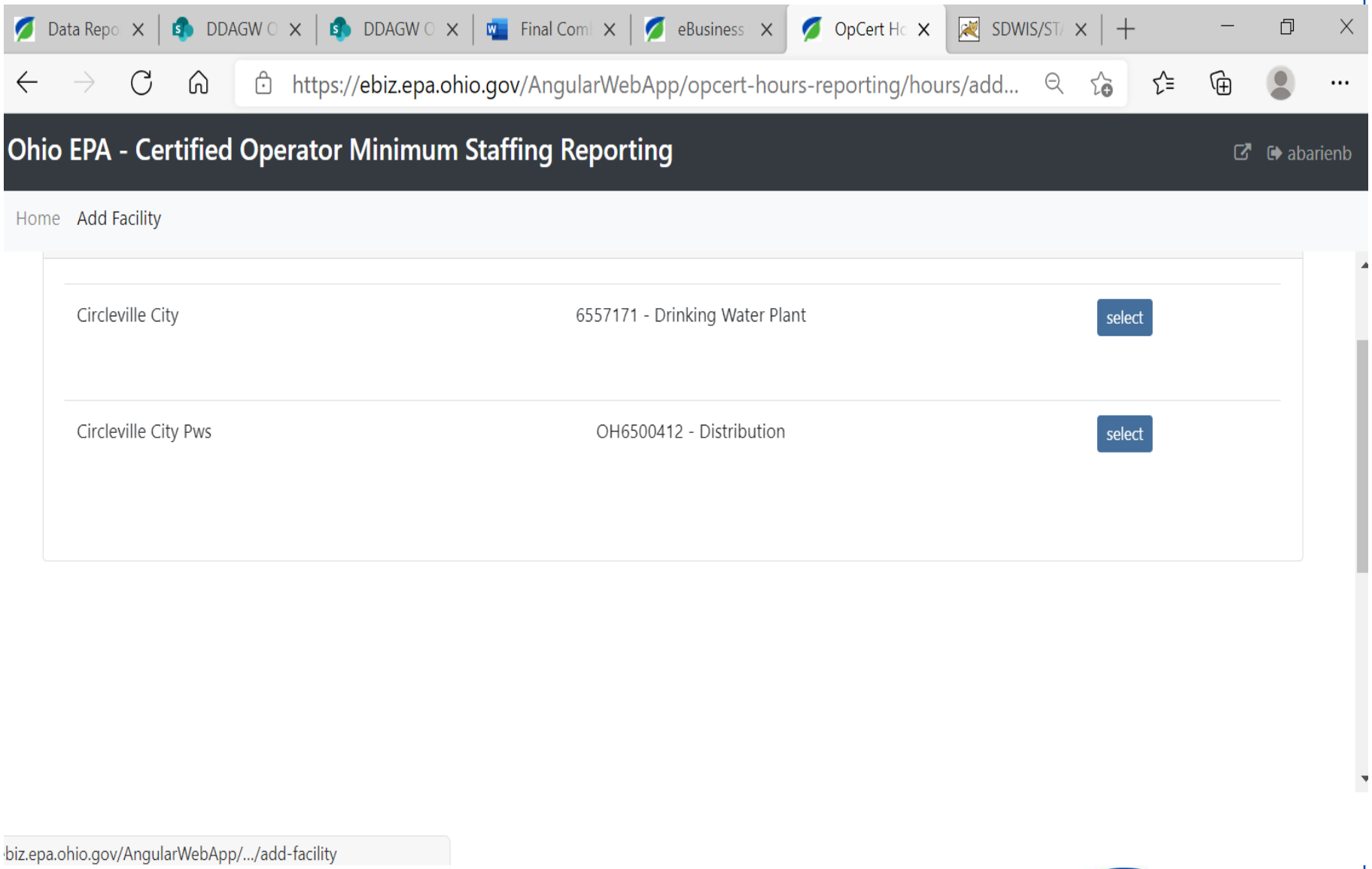

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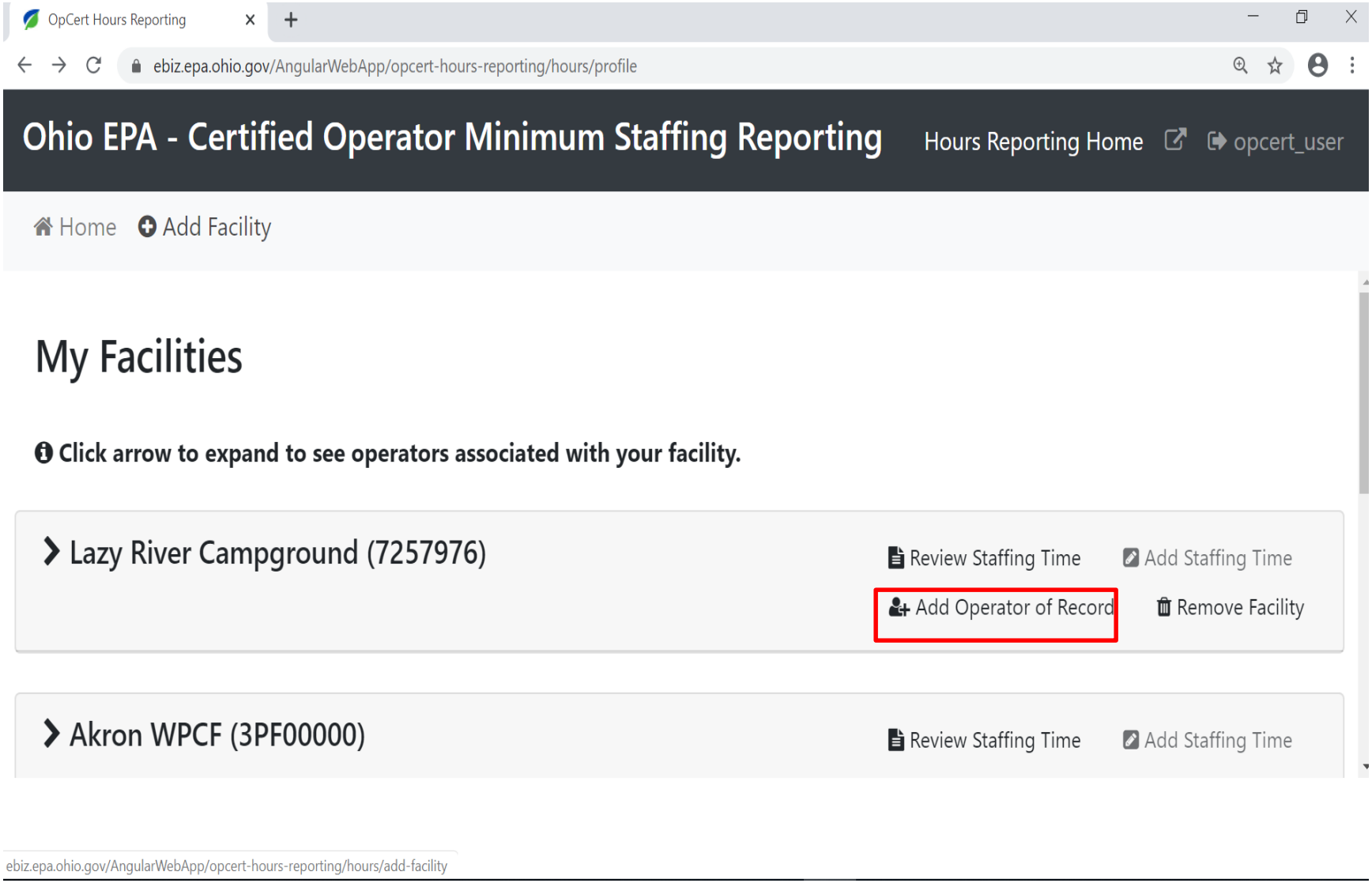

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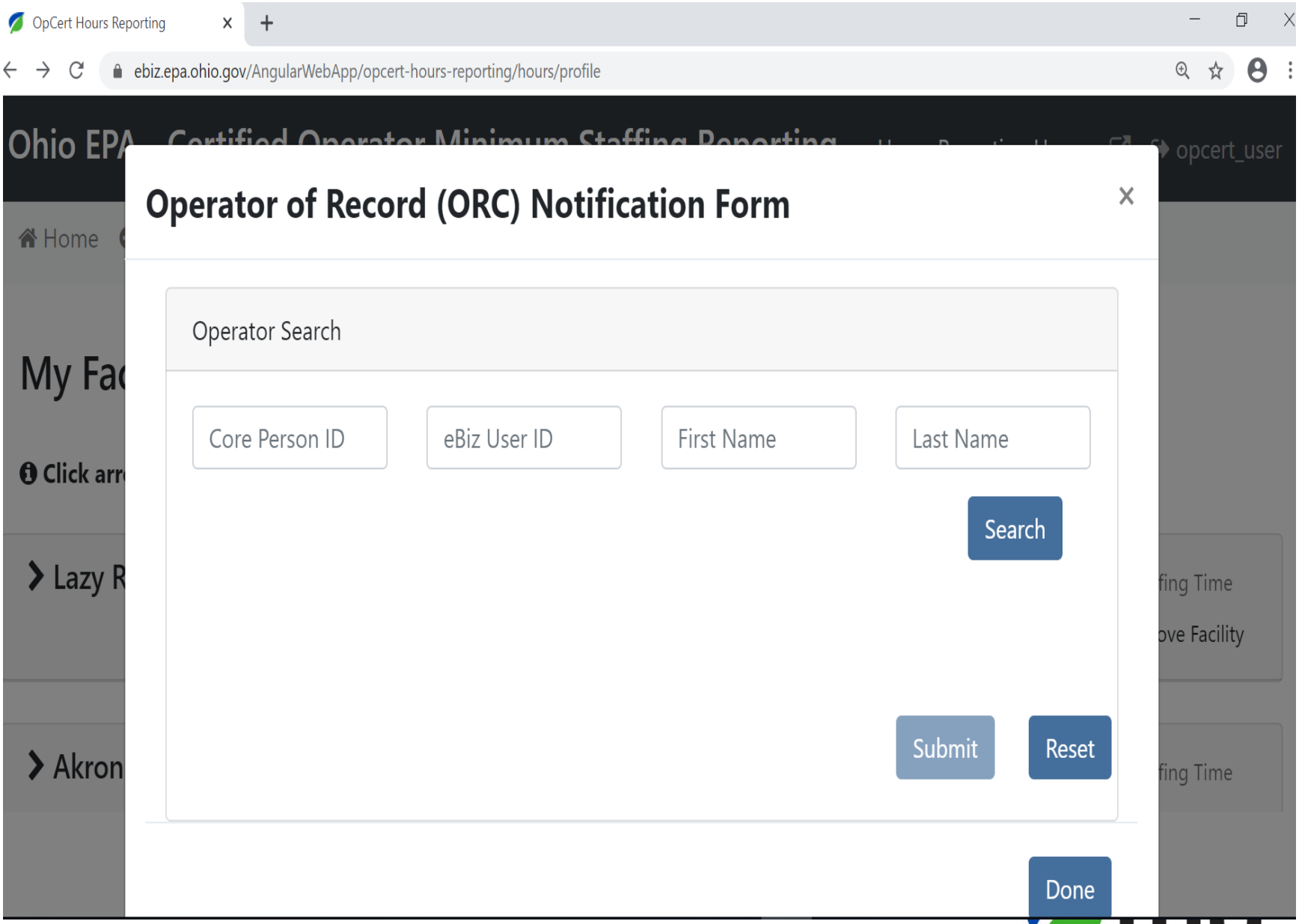

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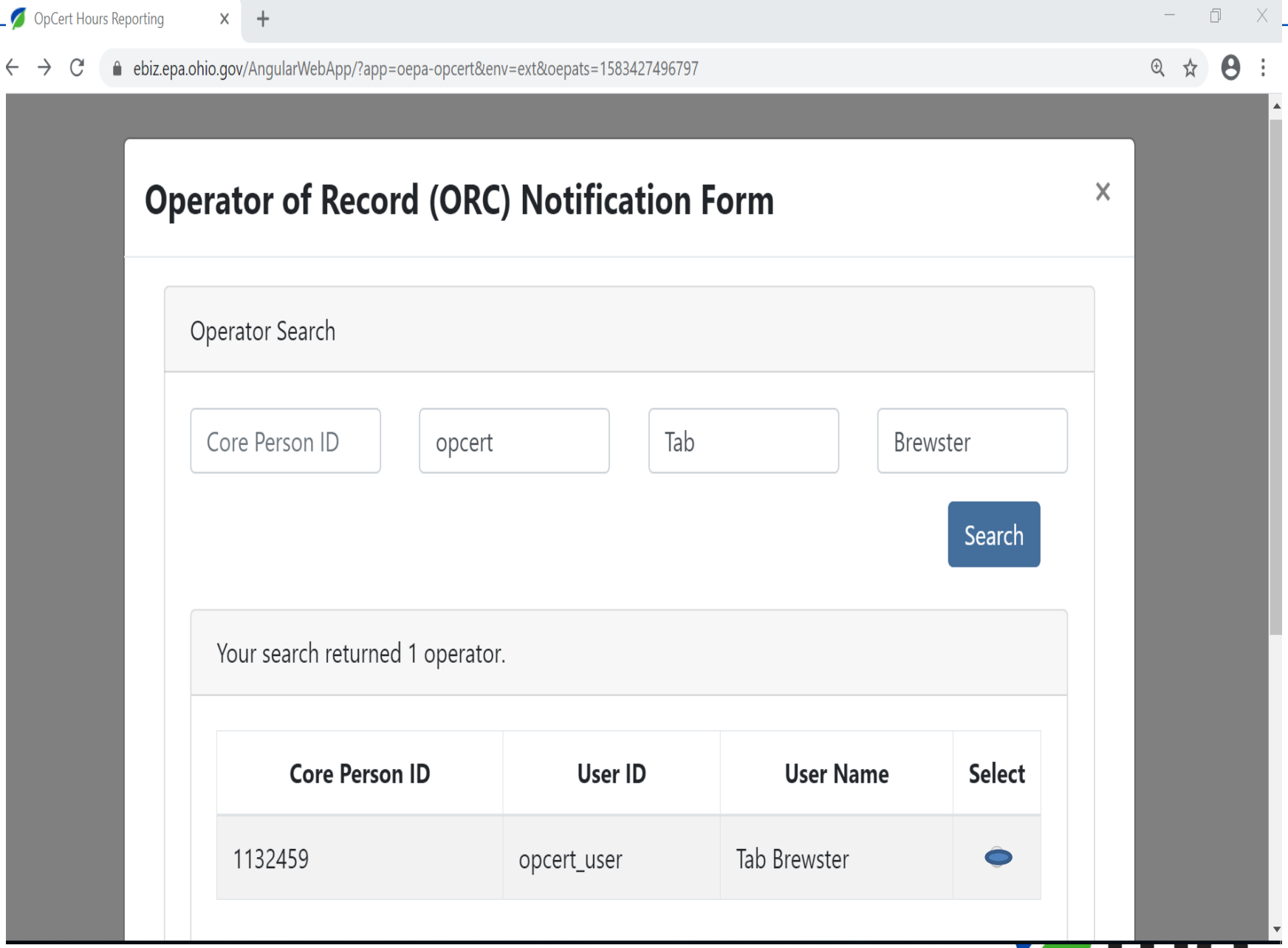

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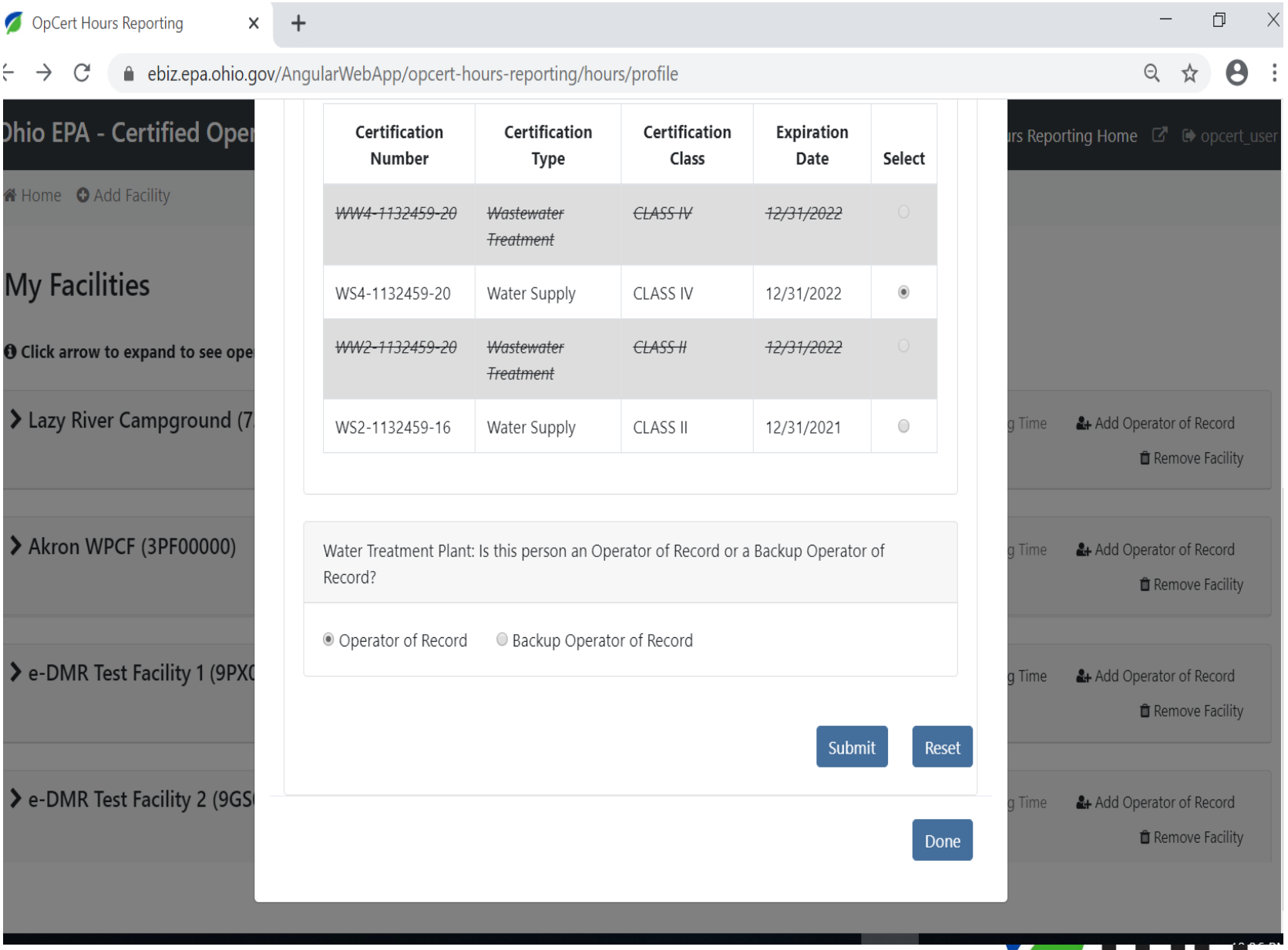

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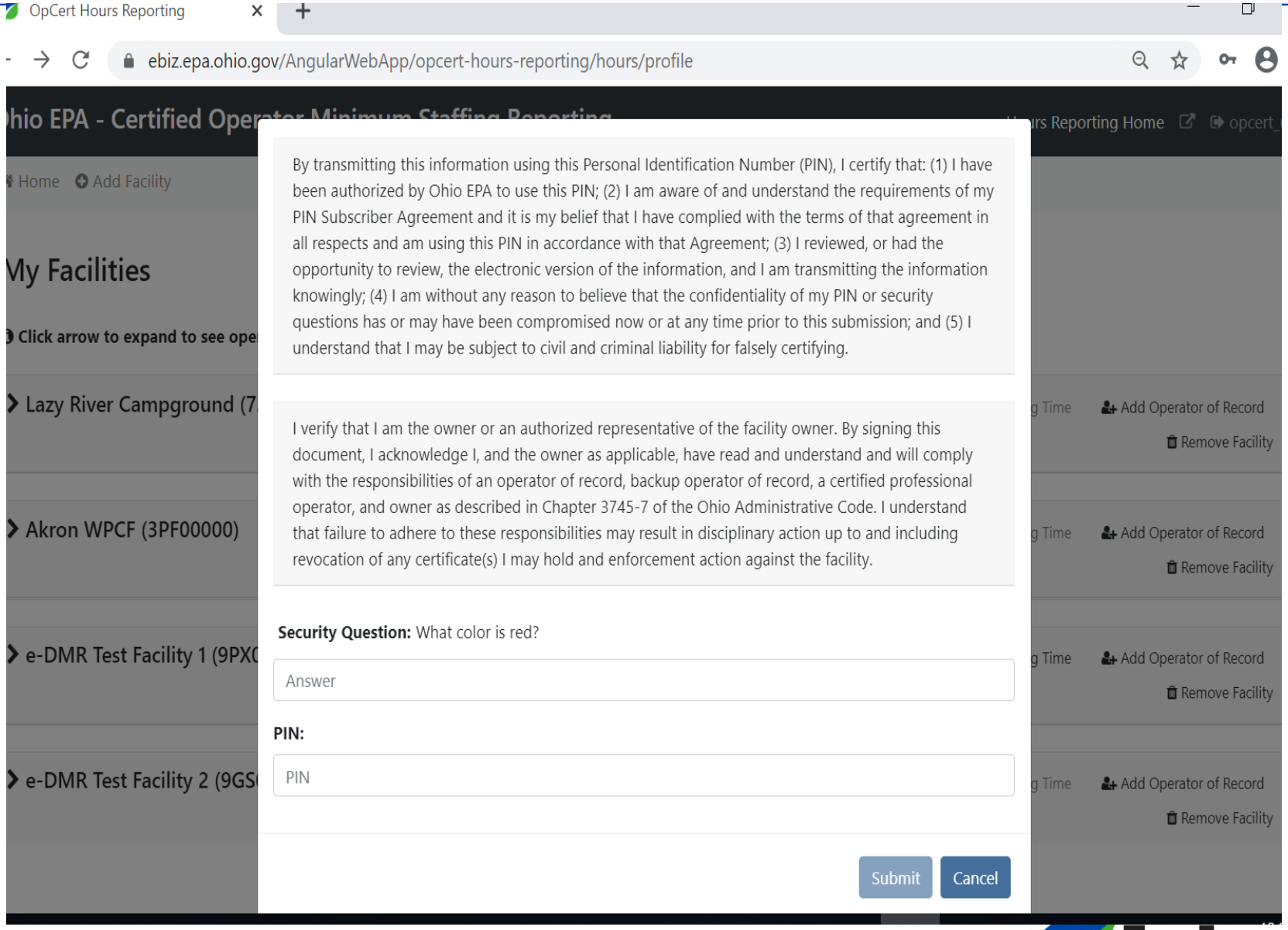

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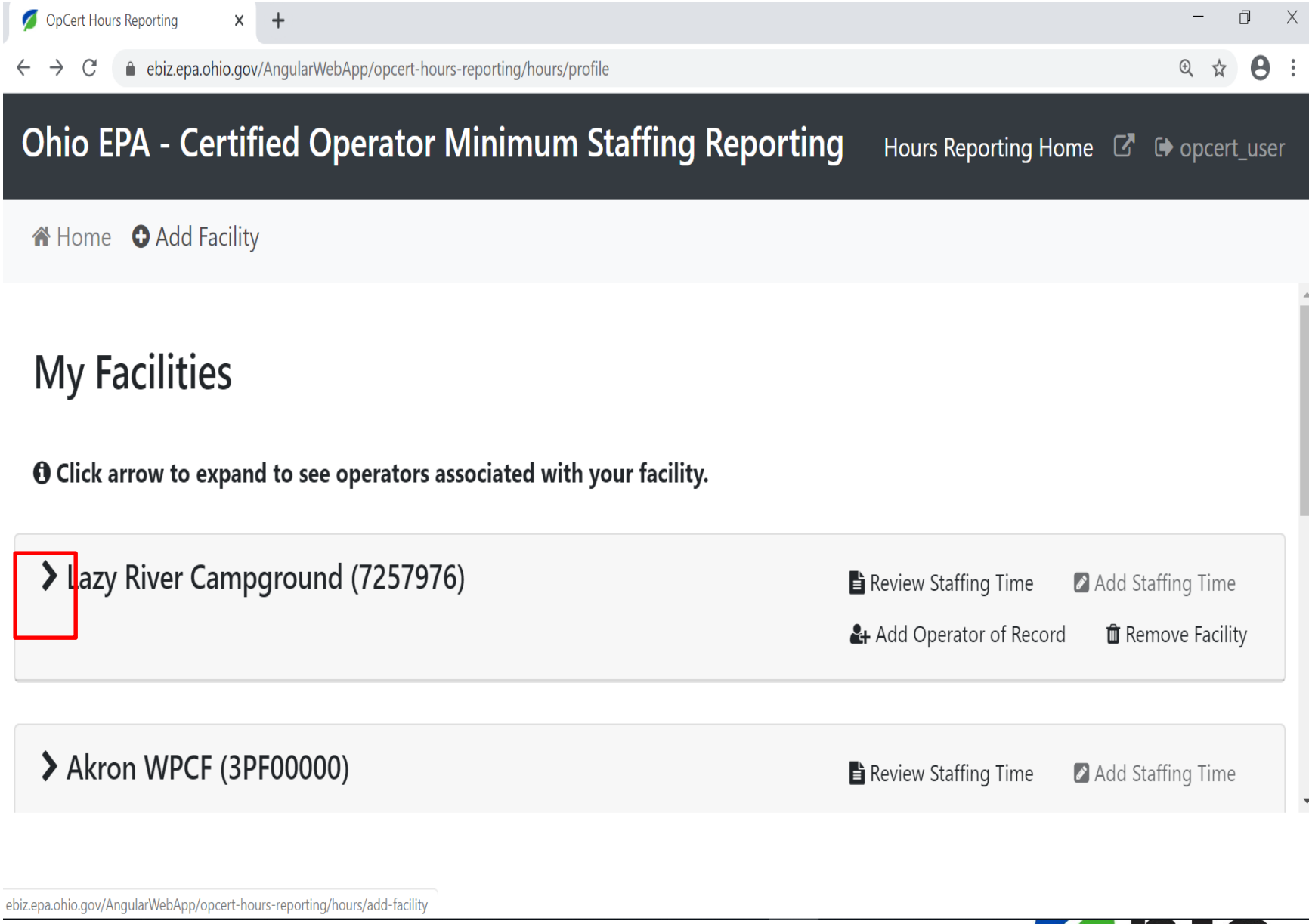

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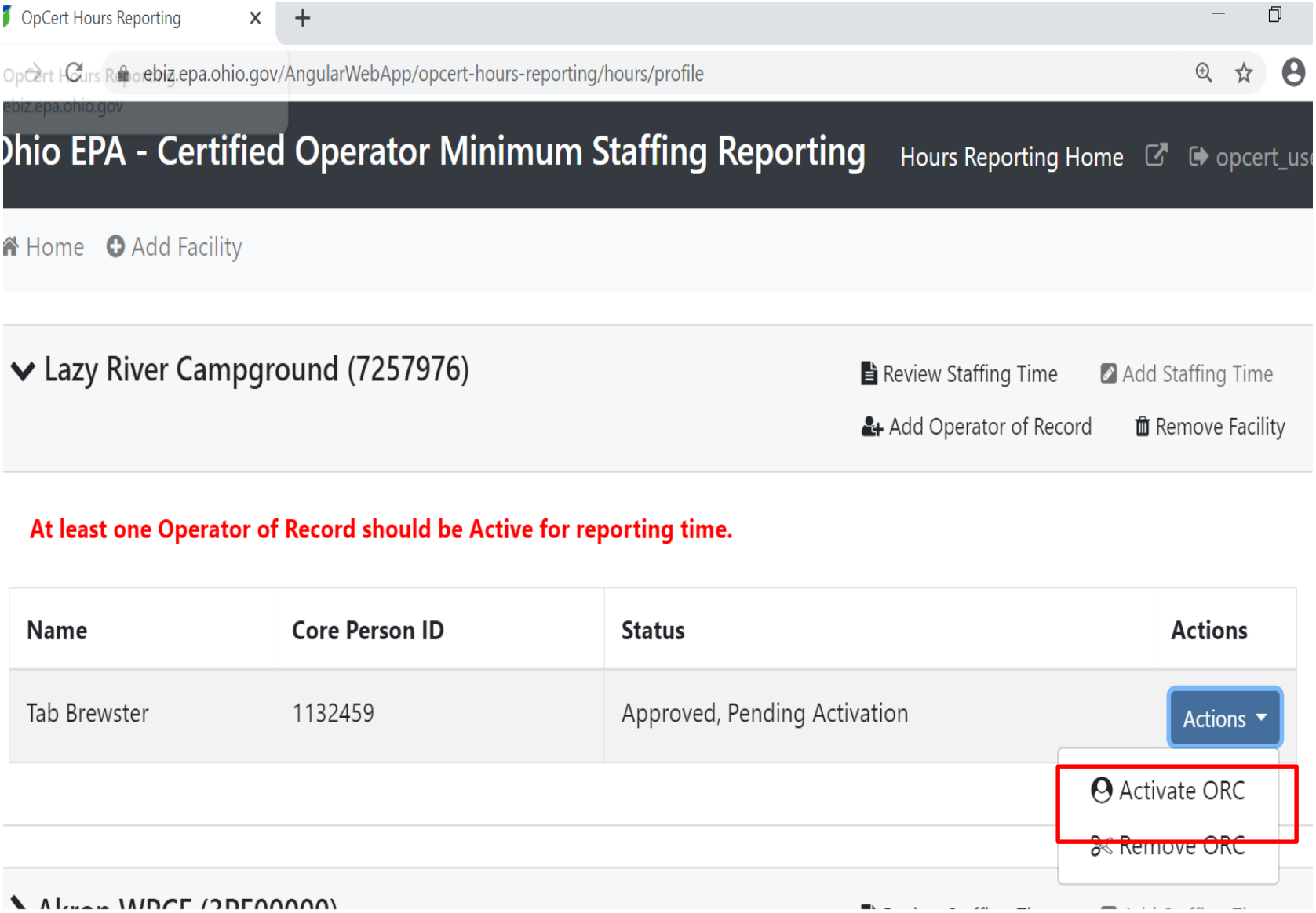

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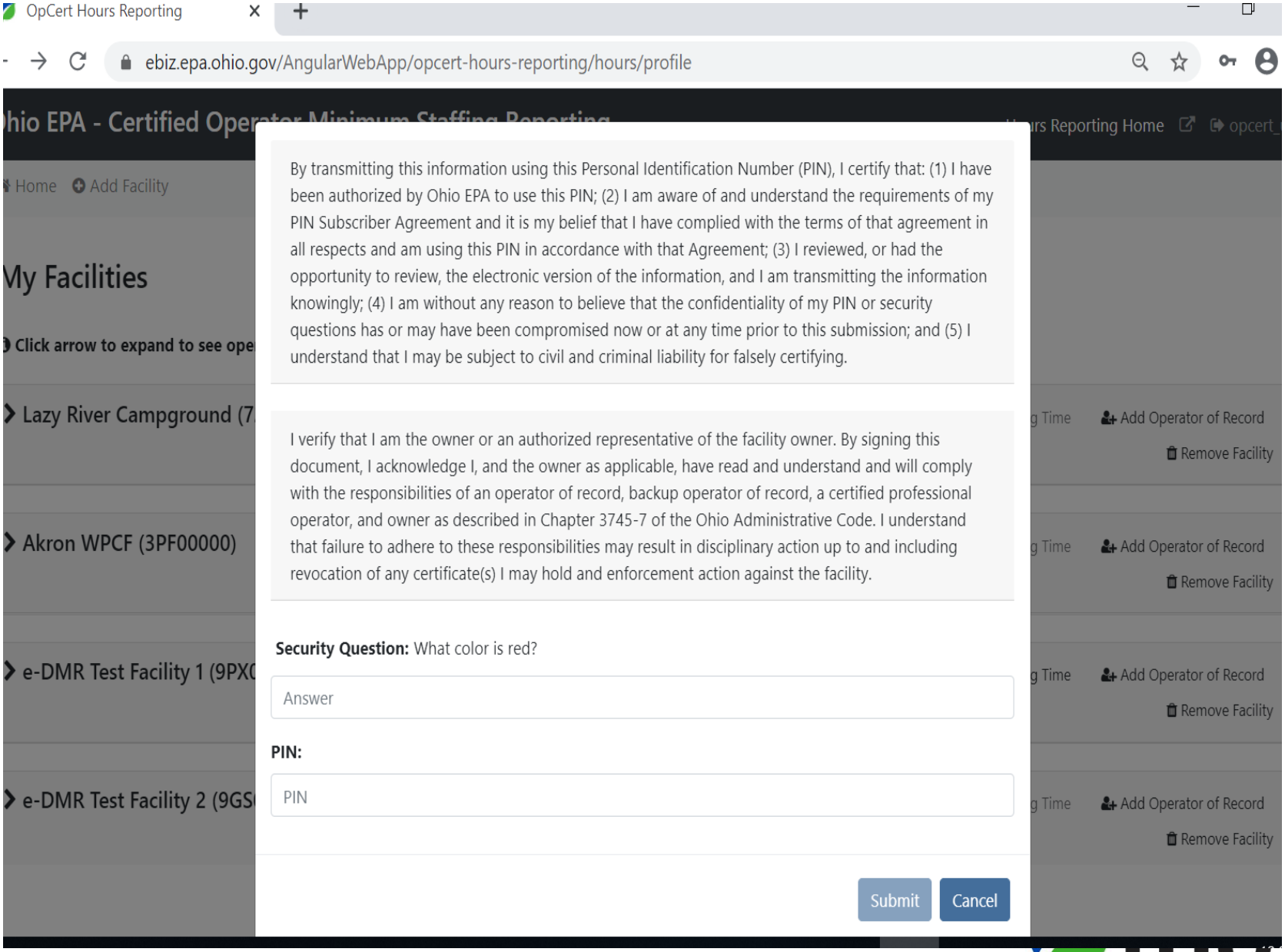

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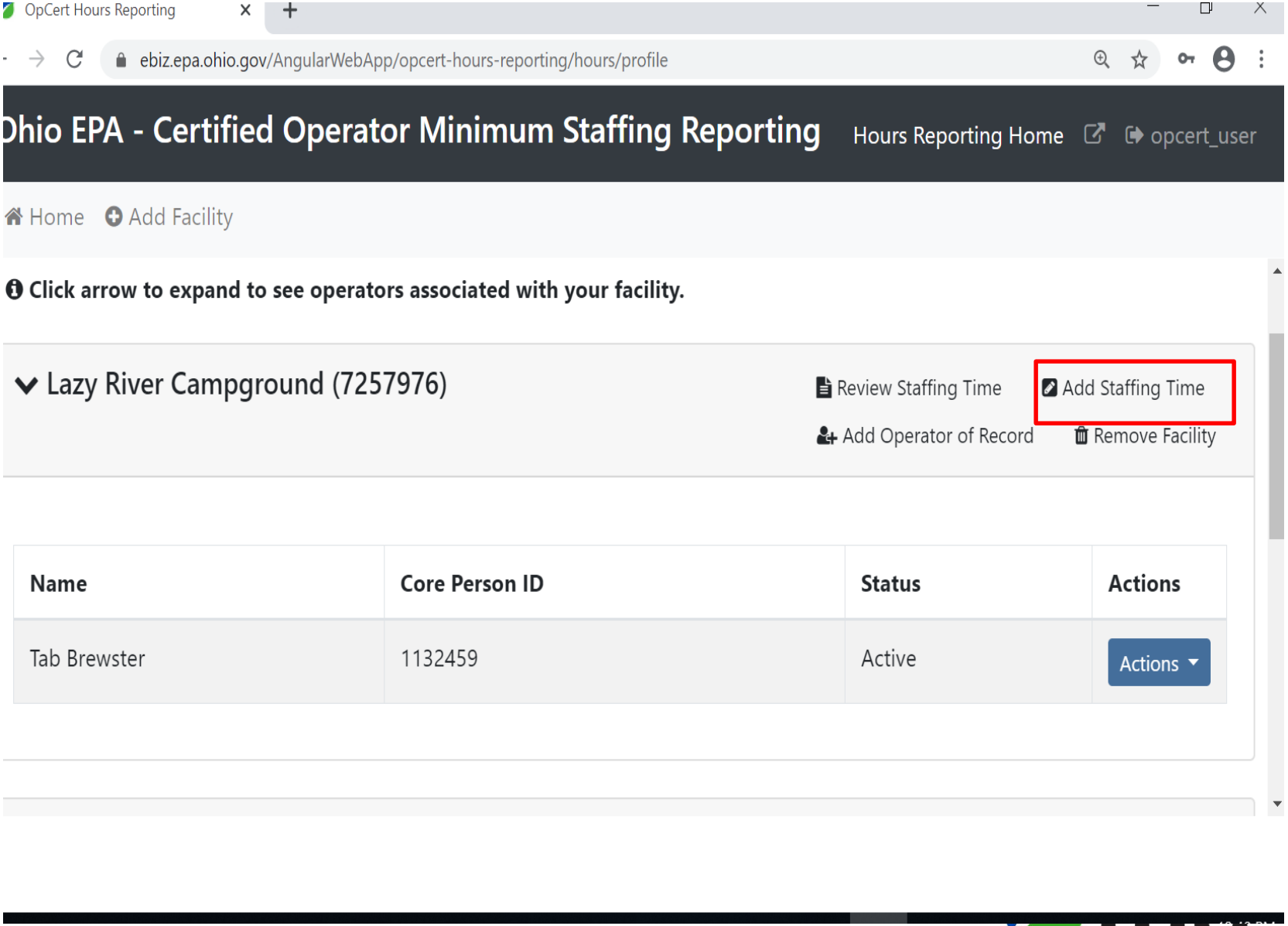

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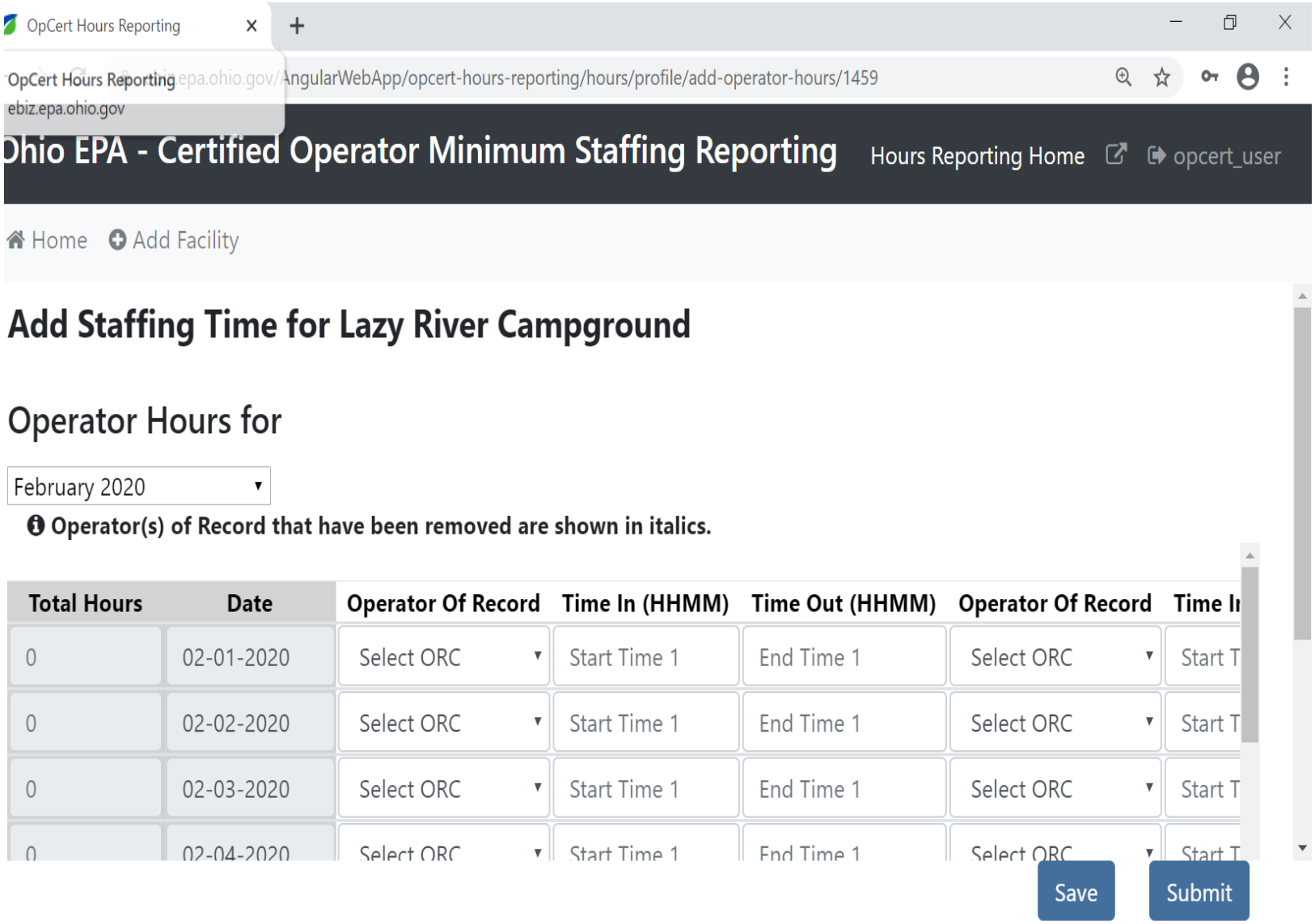

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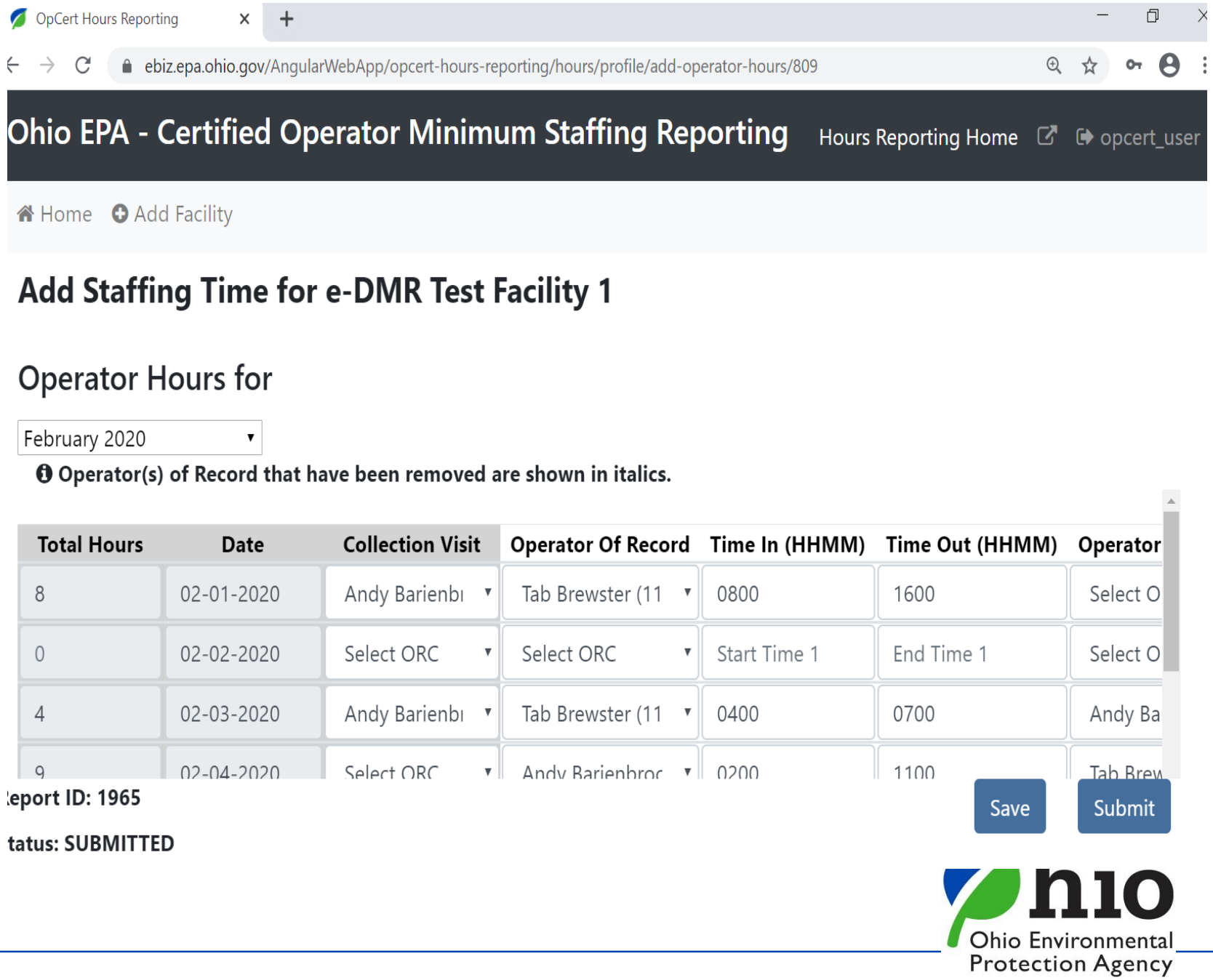

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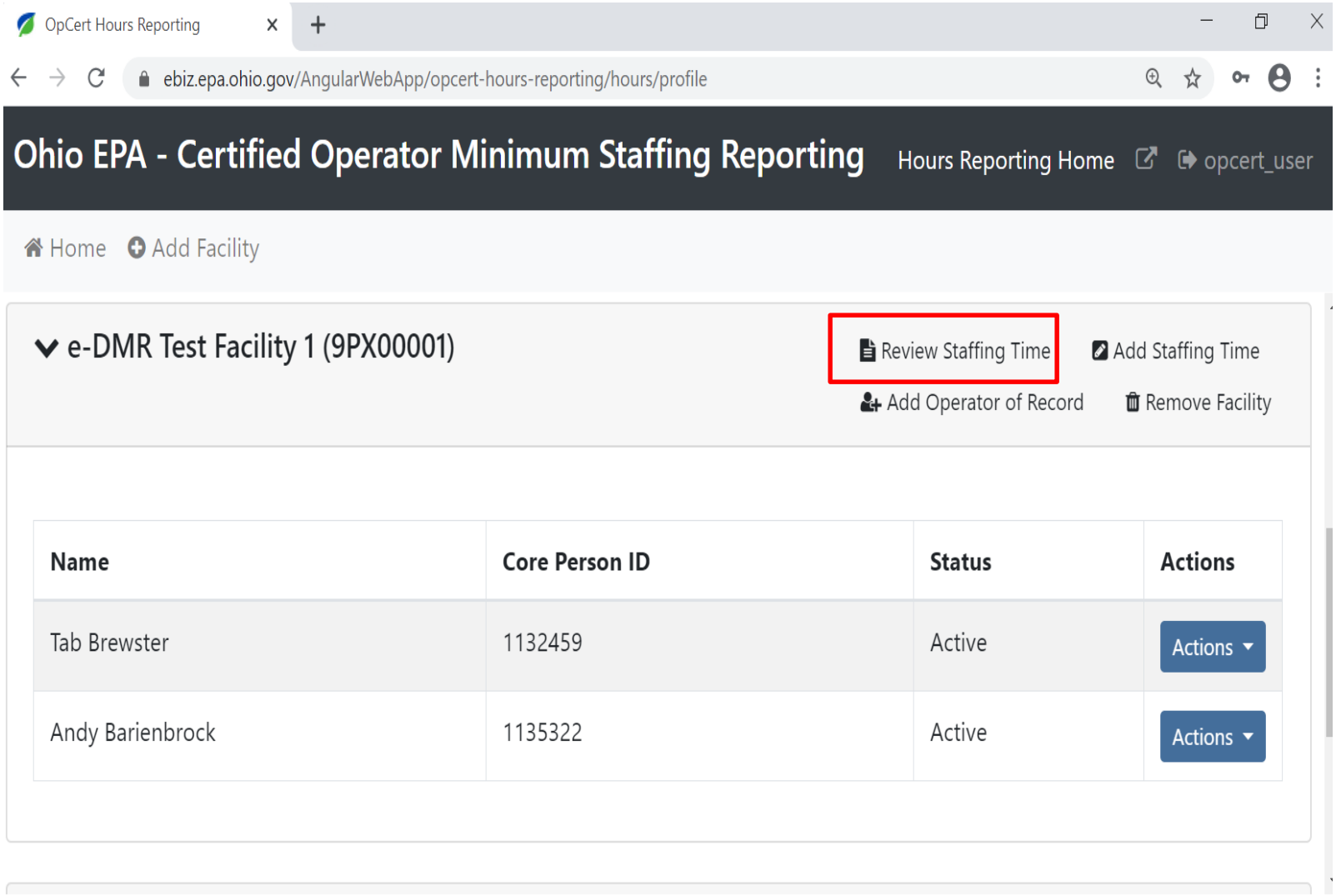

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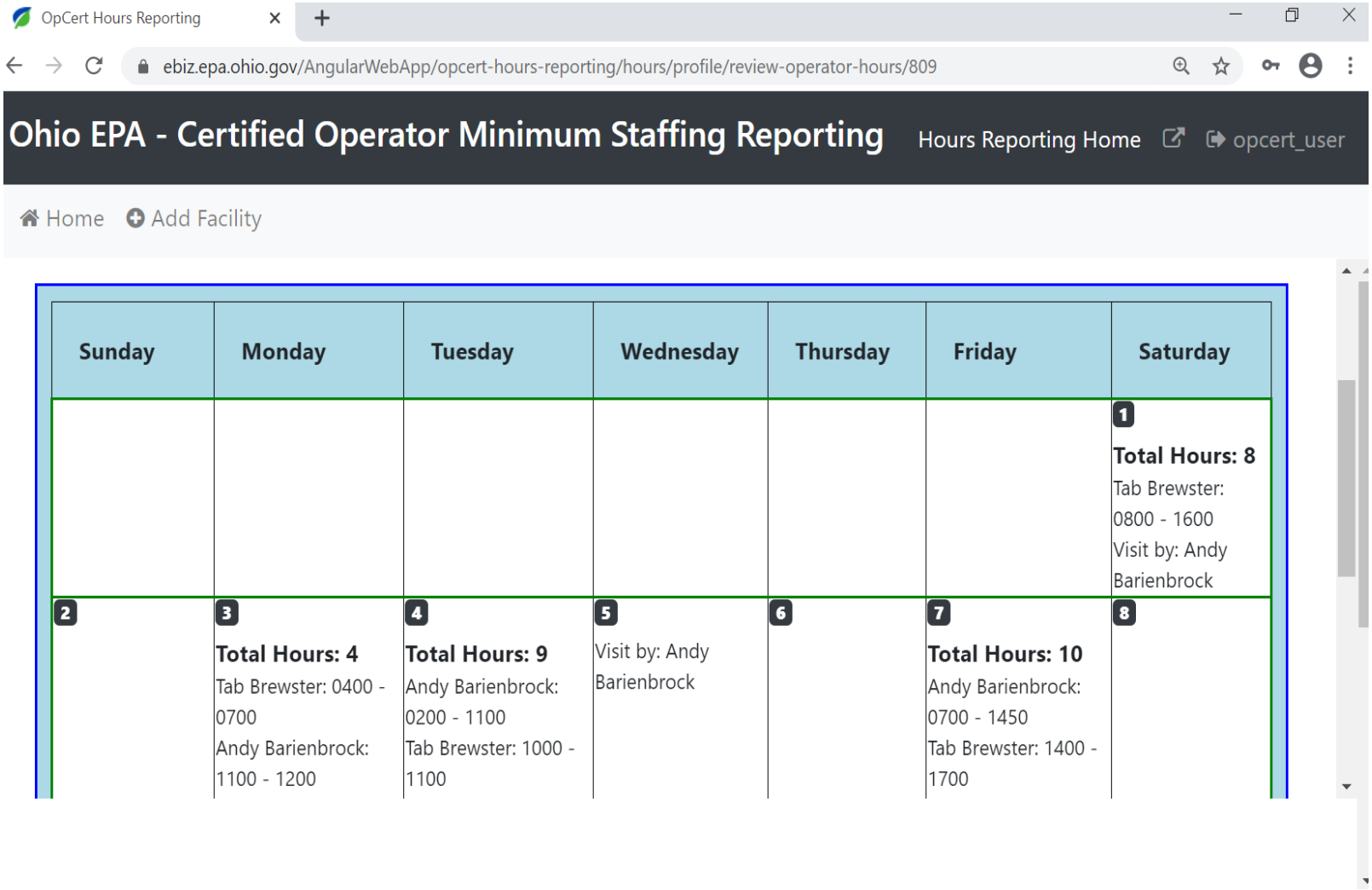

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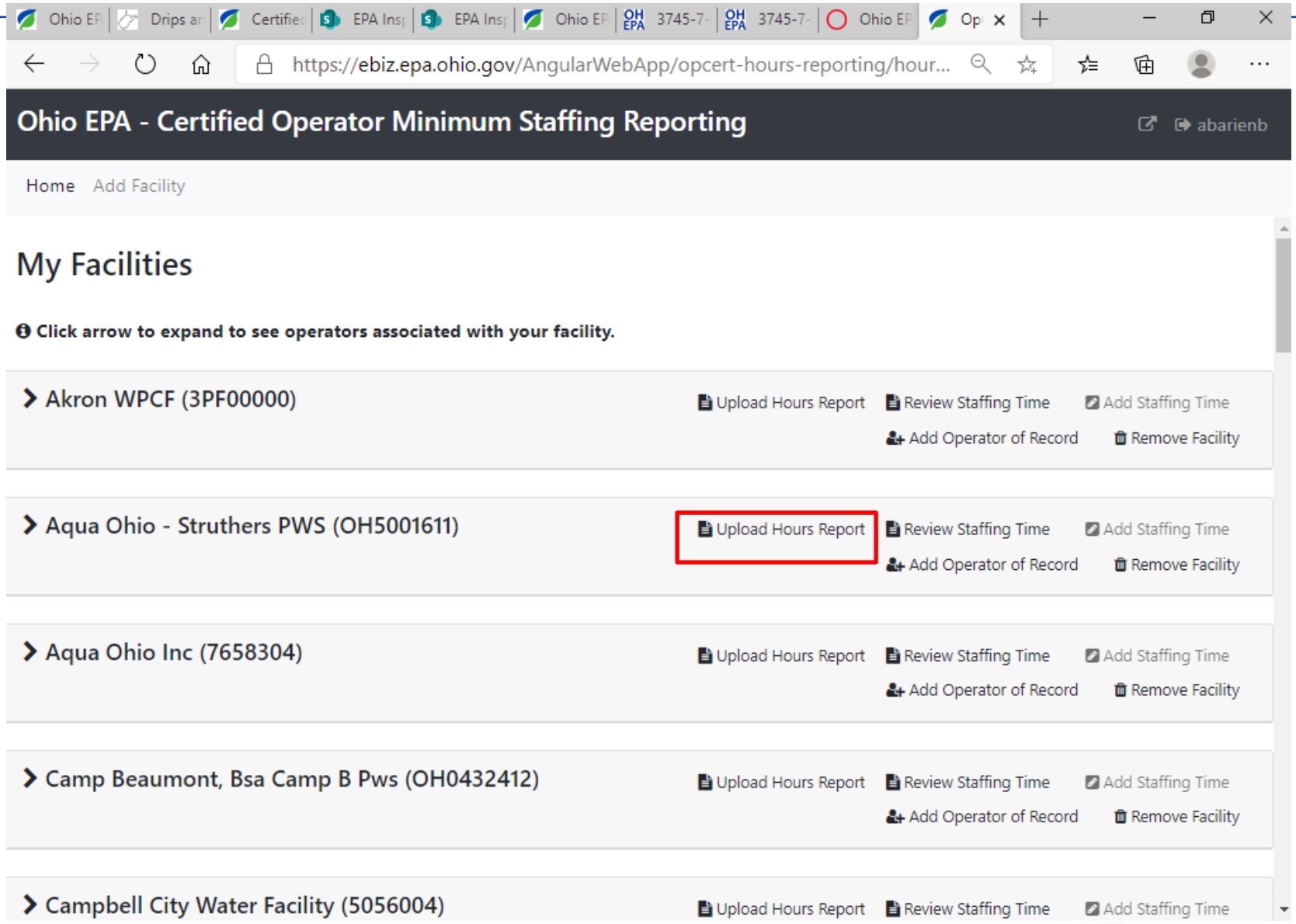

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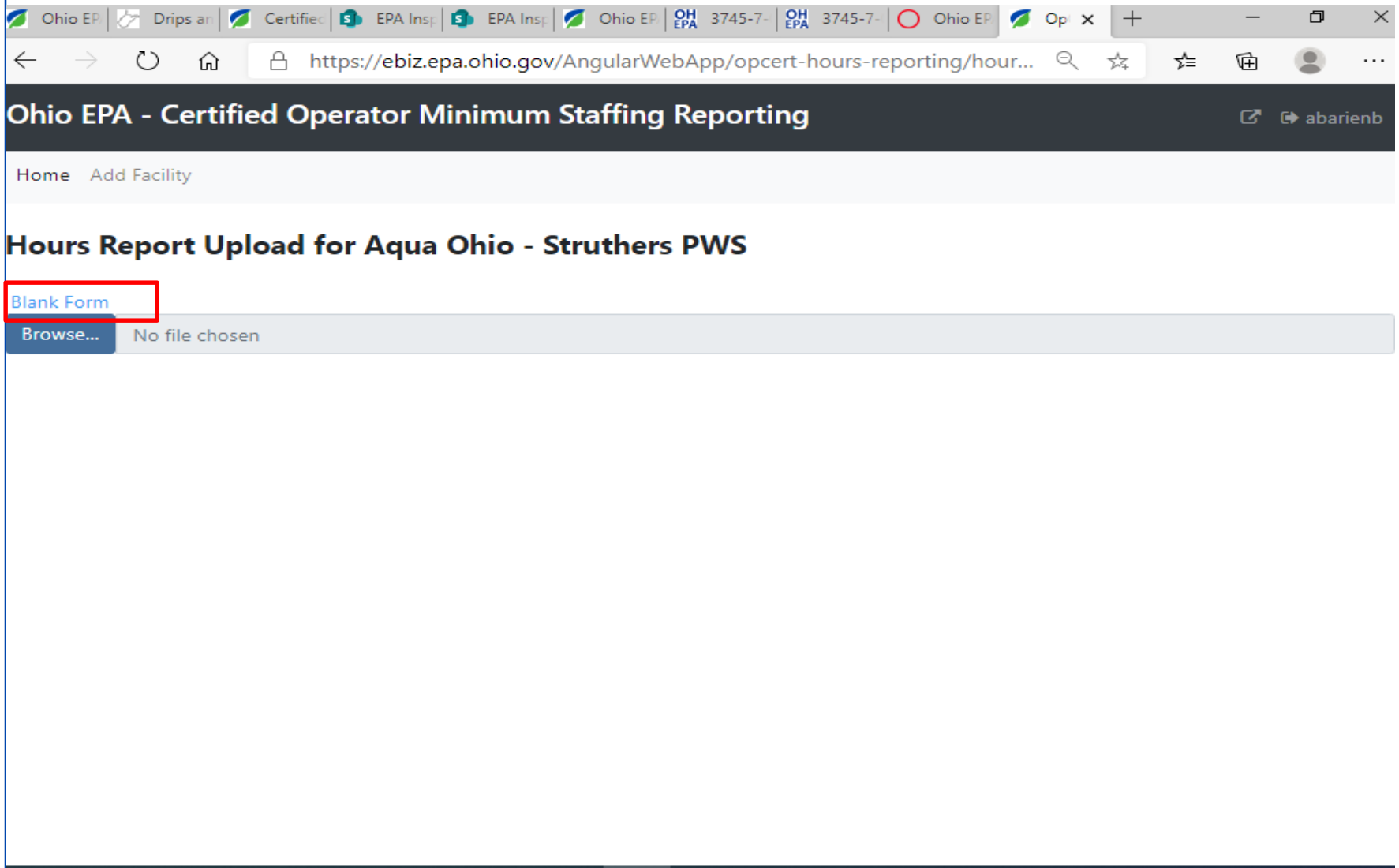

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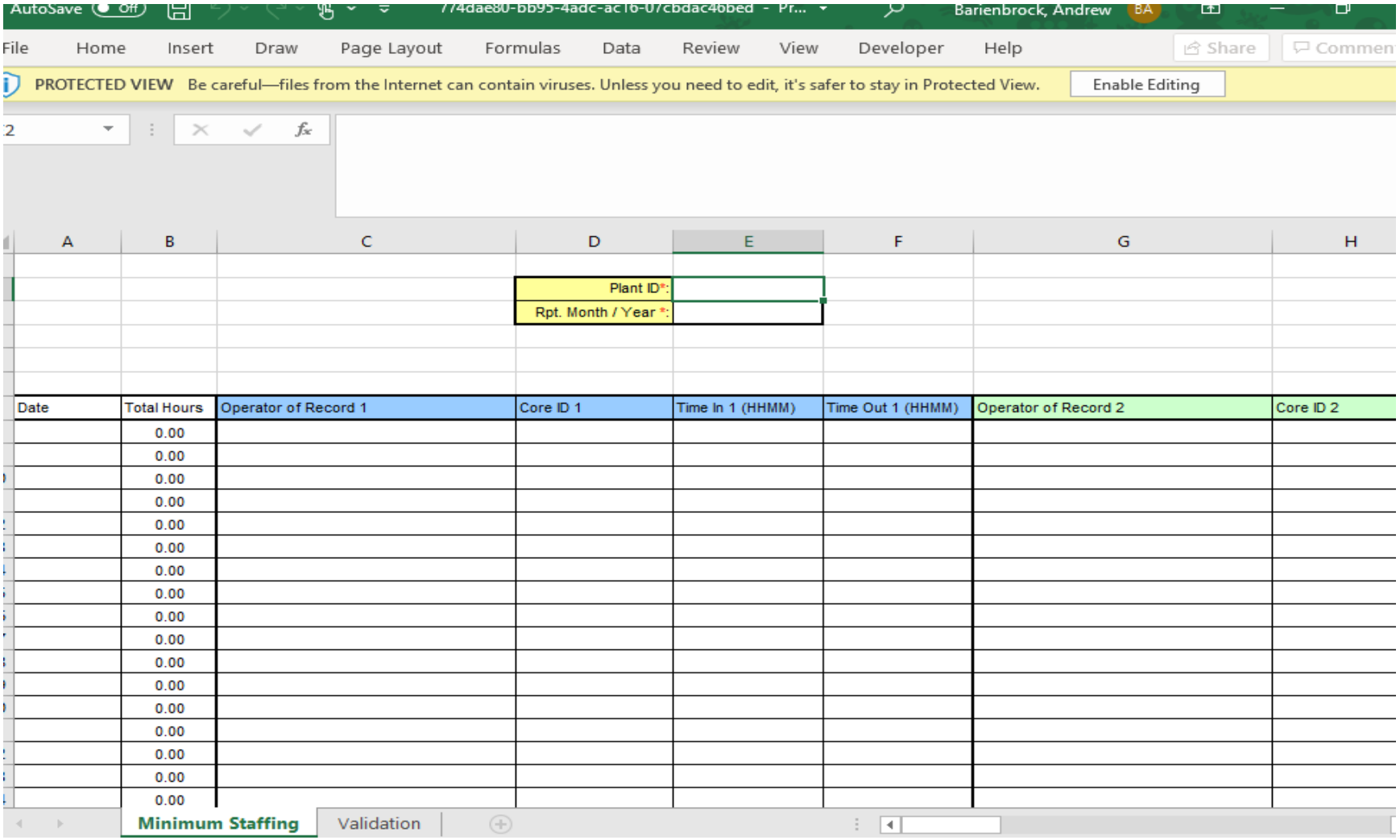

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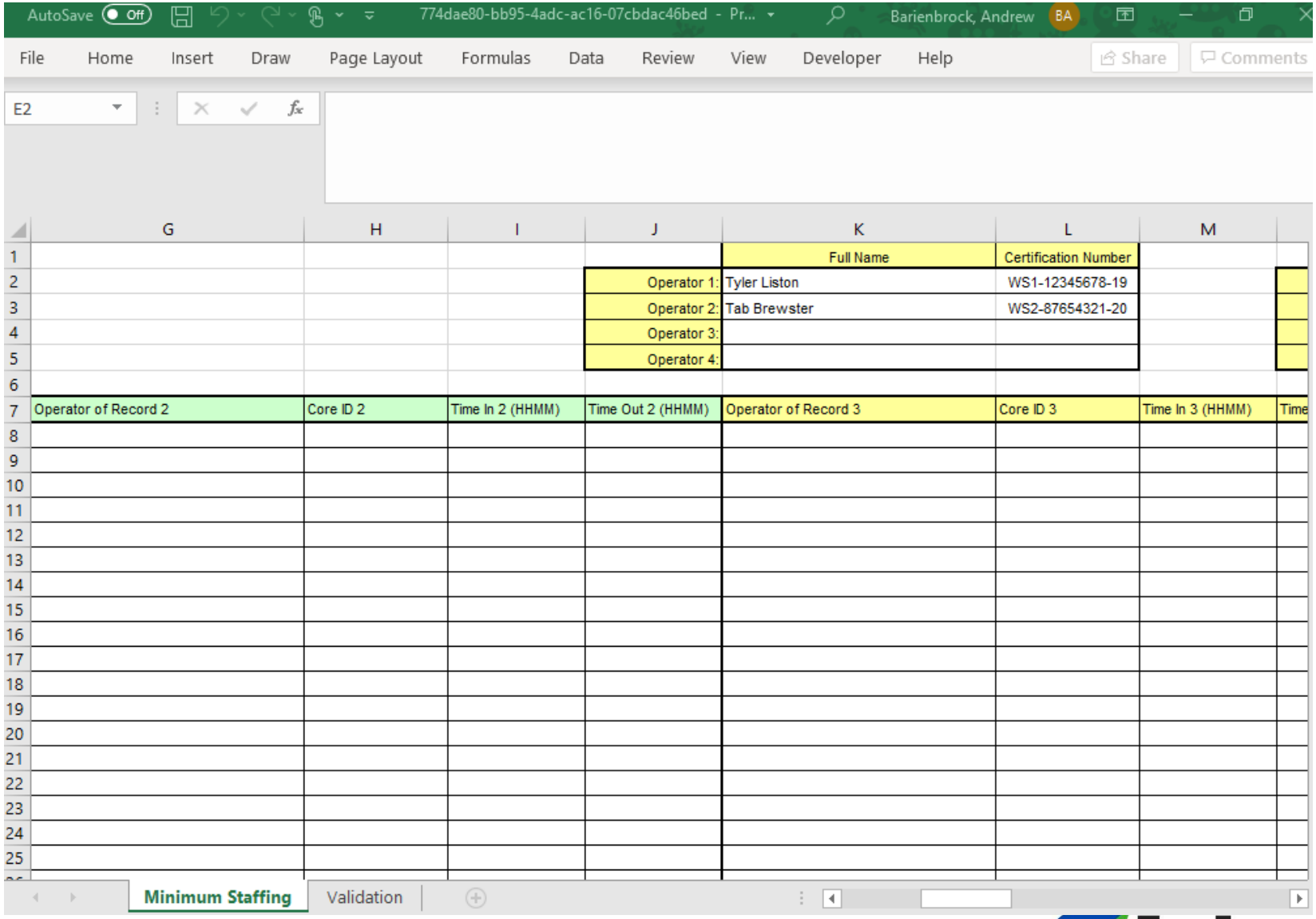
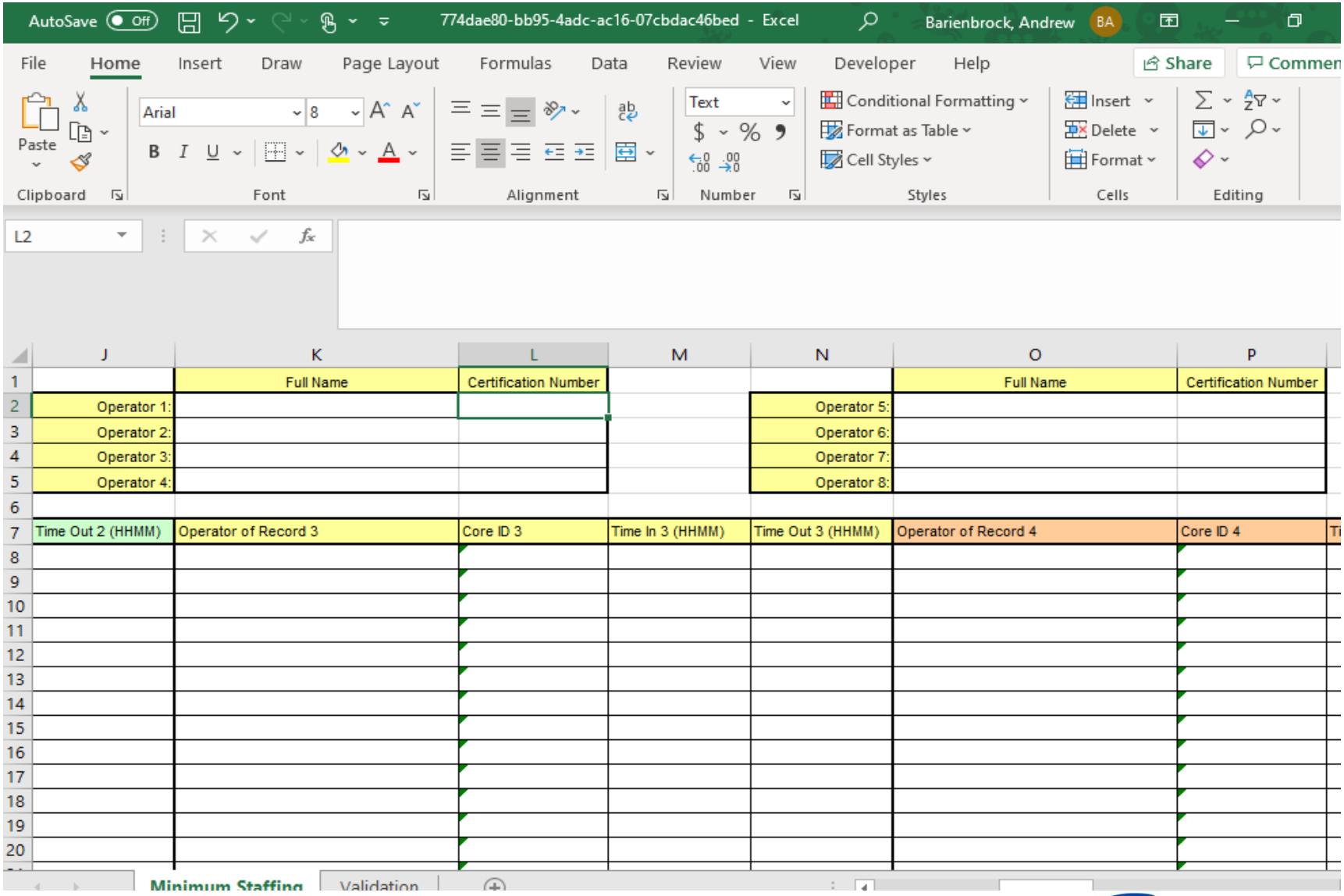


Ohio Environmental Protection Agency



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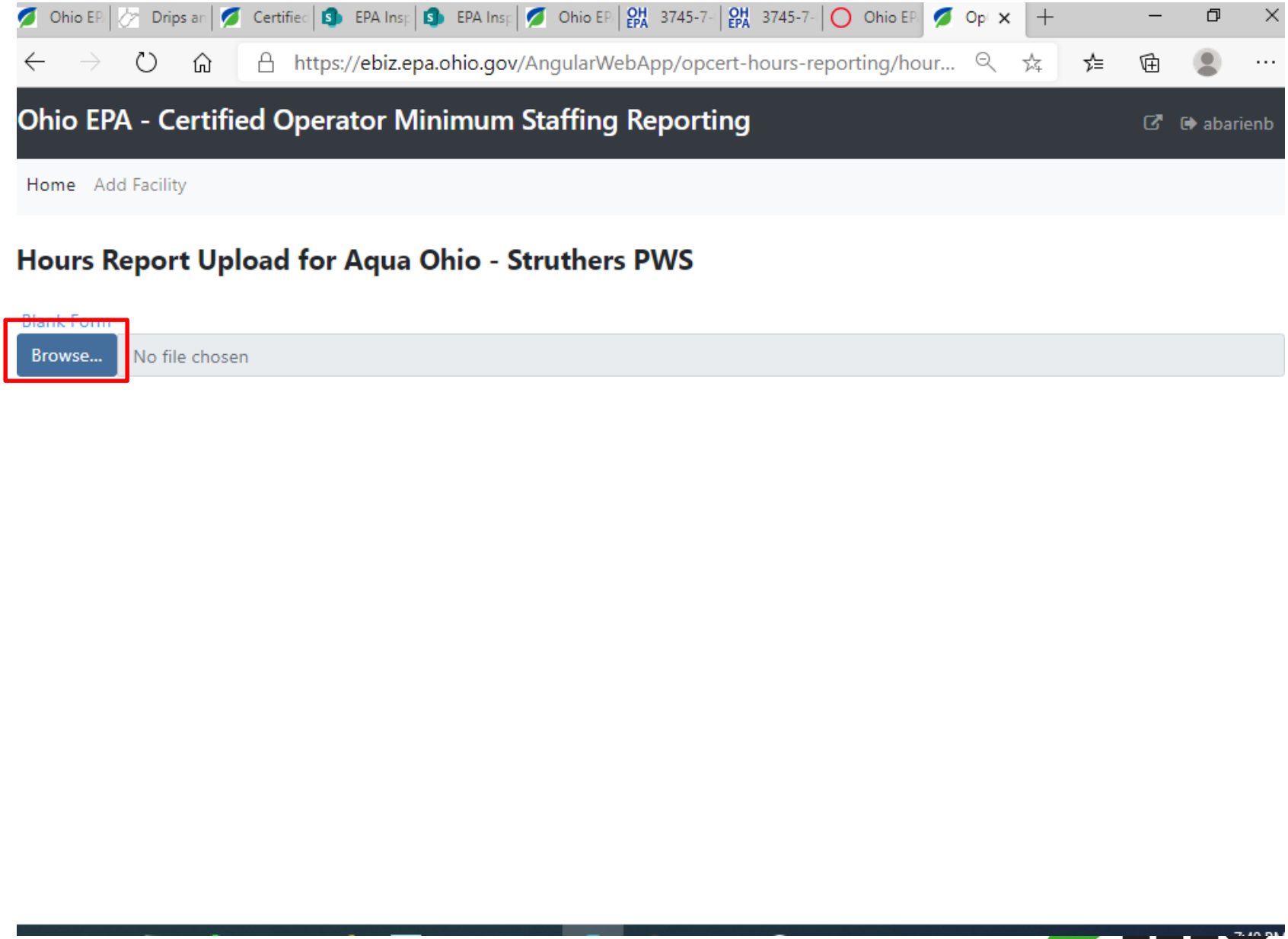

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Reporting tips

- Uploadable Form
  - Once a successful upload is completed an ORC must go into the add staffing time button and review the information that was uploaded and submit to ensure the report is submitted
  - Once a form is uploaded, the only way to edit the staffing times is to use the “add staffing time button”
  - The format of the form must not be changed.
  - For the plant, the facility ID/STU number can be found right after the name of the plant in your list of facilities.

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Reporting Tips

- For small facilities it is generally easiest to just use the add staffing time button.
- ORCs and backups must activate themselves once Ohio EPA approves the service to be able to report.

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Cyber Security

- Emerging and real threat to SCADA systems.
- Resources
  - Ohio EPA Security and Emergency Preparedness
  - US EPA Guide for water sector Cyber Security
  - Response partnerships
    - Ohio WARN
    - Water ISAC (Water security network)

Ohio Environmental Protection Agency

Website Update

Operator | Contract Operators | Training Provider | Exam Information | Advisory Council

Forms and Resources | Career Information | Contacts

Access to any services, lists or forms you may need as an operator, or to become an operator, can be found here. Use the eBusiness Center, to submit a variety of applications, access your profile, update contact information and pay fees online.

NEW REQUIRED TRAINING: Starting Aug. 15, 2018, all applicants will need to review the Operator Certification Required Training document **prior** to submitting the Ohio EPA exam, third-party exam certification, reciprocity and renewal applications and Operator-in-Training forms.

- eBusiness Center
- Certification
- Operator-in-Training (OIT)
- Renewal
- Operator Lists
- Operator of Record

QUESTIONS?

Call the Operator Certification Hotline at **1-866-411-OPCT (6728)** or email us.

WANT TO RECEIVE UPDATES?

Subscribe to the Operator Certification Mailing List

DDAGW Site Links

Select an item and click "Go" to navigate

Go

Public
DRINKING WATER
Advisories

Public Water System
MONITORING SCHEDULES

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Website Update

Career Information tab

- Updated job boards.
- Improved veteran information and outreach.
- Provide links to apprenticeship, associate degrees and certificate programs.

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Questions?

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