

2024 Certified Installer Training Session 3

Division of Water Engineering Support and Plan Review Section

April 18, 2024



Agenda

- First Part:
 - Website (septic.alaska.gov)
 - Join the listserv! How to maintain your system, sewage clean-up procedures, area office contacts, etc)
 - Stay up to date, a website
 - Ed Account Creation (First time login)
 - Ed Navigation Internal (Live Demo)
 - Ed Submitting 24-hour notifications (Live Demo)
 - Submitting a Documentation of Construction
- Second Part:
 - Certified Installer Forms
 - Navigation (Explorer)
- Third Part:
 - Documentation of Construction Drawings
 - Resources beyond EDMS Explorer (Department and otherwise)
 - GIS Maps





- ESPR Team – Ryan Peterson, Tony Sonoda, Martha Harrison
- Manager – Tonya Bear
- EDMS support staff. Jessica Davison
- General EDMS Help (help on signing in etc.)

Introduction



Website

The screenshot shows a web browser window displaying the Alaska Department of Environmental Conservation website. The URL is <https://dec.alaska.gov/water/wastewater/engineering/>. The page title is "ENGINEERING SUPPORT AND PLAN REVIEW" and the sub-heading is "Onsite Disposal Systems".

Onsite Disposal Systems
Onsite disposal systems (OSDS), called septic systems, are widely used in Alaska. Proper installation and care of these onsite systems by homeowners and contractors is essential to maintaining the health of the system, public health and Alaska's environment. This program provides training for proper installation of conventional OSDS.

In areas with difficult site conditions, poor soil or high groundwater conditions that can't support a conventional system an alternative OSDS may be needed. In some instances a waiver may be required. These systems must be designed by an engineer and plans must be reviewed and approved by the Alaska Department of Environmental Conservation prior to construction.

Conventional Onsite System

The diagram illustrates a conventional onsite system. It shows a house with a toilet, sink, and shower. Wastewater flows from these fixtures into a septic tank. From the septic tank, effluent flows into an absorption area, which is a trench containing perforated pipes. The effluent is then absorbed into the surrounding soil. Labels include: Toilet, Sink, Shower, Septic Tank, Absorption Area, and Groundwater Table.

NEWS AND UPDATES

- Effective October 1, 2023 - Wastewater Disposal 18 AAC 72 (PDF)
- 2023 Wastewater Disposal Regulation Updates
- EDMS: Electronic submittal application for engineered systems, documentation of constructions, and certified installer certificates
- Join our list server for email updates, news and announcements

REGULATIONS

- Wastewater Disposal 18 AAC 72 (PDF)
- Water Quality 18 AAC 70 (PDF)
- New** - Onsite Wastewater System Installation Manual (OWSIM) Technical Guidance and Approved Best Management Practices (PDF)
- Plan Review and Related Fees Table 18 AAC 72.955
- ESPR Fee FAQ's

CONTACT US

- Program Contacts

REAL ESTATE AGENTS

- Information for Real Estate Agents

USEFUL LINKS

- Municipality of Anchorage On-site Septic System Program
- Drinking Water Program
- Private Drinking Water Wells and Systems
- Domestic/Municipal Wastewater Discharge Permits

HOMEOWNERS

- Find Documentation on Your System EDMS Database
- How to Maintain Your System
- What to Look for When Buying Sewage Clean-up Procedures
- Installing or Repairing a Septic System
- Pit Privy Fact Sheet
- Financial Assistance - Rural Community Assistance Corporation (RCAC)

CERTIFIED INSTALLERS

- Current Certified Installer List (PDF 65K)
- How do I become certified?
- Certified Installer Class Schedule and Registration Form
- Documentation of Construction via EDMS
- New** - Onsite Wastewater System Installation Manual (OWSIM) Technical Guidance and Approved Best Management Practices (PDF)

A red arrow points to the "Documentation of Construction via EDMS" link in the Certified Installers list.



Proposed Website (Draft)

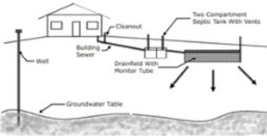
Planned total reorganization of the ESPR website. Reorganization will focus on need based responses.

Error loading Partial View script (file: ~/Views/MacroPartials/nav-water-espr.cshtml)

You are here: DEC / Water / Wastewater / Engineering / Testing Page for new Homepage

Welcome

The Onsite Wastewater Systems regulates wastewater treatment and disposal to protect human health through the prevention of the transmission of diseases and illness, protect the environment and water quality from degradation and establish minimum treatment, construction, operation, and maintenance standards. The minimum treatment standards apply to each domestic wastewater collection, treatment, and disposal system installed in the State.



I AM LOOKING TO INSTALL AN ONSITE WASTEWATER COLLECTION AND/OR DISPOSAL SYSTEM FOR A...

- Private Residence +
- Commercial Facility +
- City or Municipality +

I WOULD LIKE TO FIND INFORMATION REGARDING...

- an existing wastewater disposal systems serving: +
- how to become a certified installer in Alaska +
- an existing wastewater disposal systems serving: +

I AM AN INDIVIDUAL OR LOCAL GOVERNMENT AGENCY AND HAVE CONCERNS REGARDING WASTEWATER DISPOSAL

- How to report a wastewater concern to the Department +

NEWS AND UPDATES

Welcome to the newly organized webpage. Please [contact us](#) if you have trouble navigating the new site.

CONTACT US

- [Area Office Information and Program Contacts](#)

USEFUL WEBLINKS

- [Domestic/Municipal Wastewater Discharge Permits](#)
- [Drinking Water Program](#)
- [Environmental Protection Agency Underground Injection Control Program in Region 10](#)
- [Municipality of Anchorage On-site Septic System Program](#)
- [Private Drinking Water Wells and Systems](#)

REGULATIONS

- [Wastewater Disposal 18 AAC 72 \(PDF 234K\)](#)
- [Water Quality 18 AAC 70 \(PDF 833K\)](#)
- [Onsite Wastewater System Installation Manual \(OWSIM\) with Interim Guidance \(PDF 7.47M\)](#)





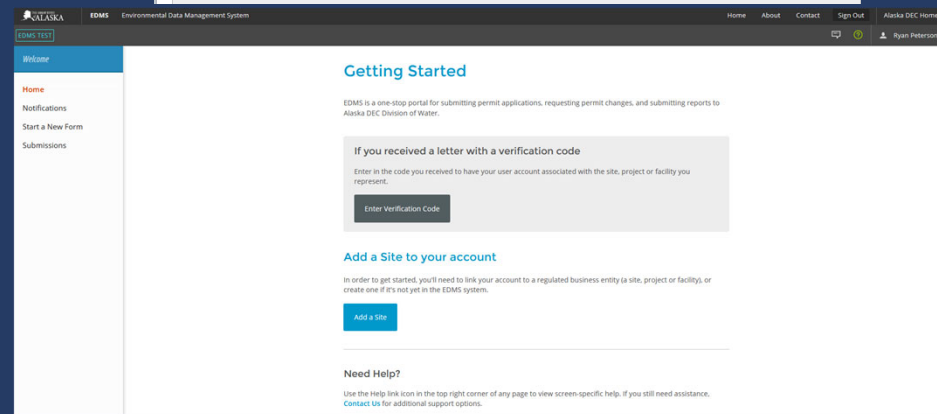
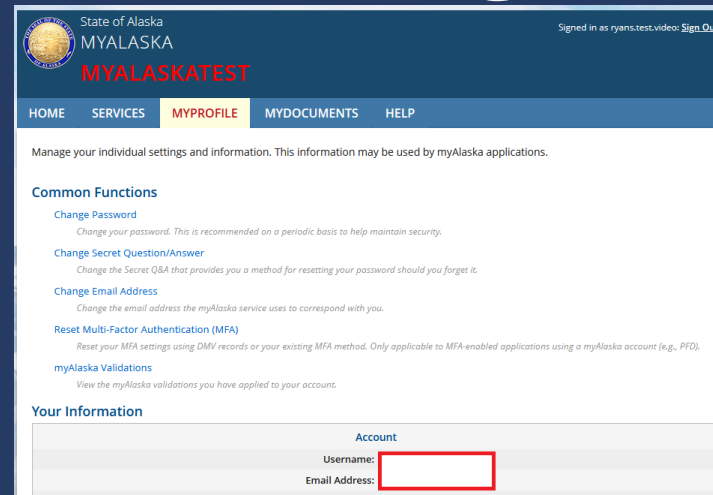
ACCOUNT CREATION (FIRST TIME LOGIN)

Account creation (first time login)

First time users or login may be prompted for security questions. This is a one time prompt.

It is extremely important to verify that your my.Alaska.gov and your CI email are the same. If different you may not see any information. You can create a new my.Alaska.gov account or change. Department recommends to have a personal and a business email address.

If logged in correct, you should automatically be associated with your existing certification account!



Account creation (first time login)

Set Up Security Questions

To continue using the EDMS system, you must first set security questions for your account.

For each of the following fields, choose a challenge question prompt from the available options, and provide a corresponding answer.

To help keep your account secure, choose question/answer pairs that will be both easy to remember and difficult for others to guess.

Security Question 1

In what city did you meet your spouse/significant other? ▼

Your answer ?

Security Question 2

Choose a question prompt... ▼

Your answer

Security Question 3

Choose a question prompt... ▼

Your answer

Security Question 4

Choose a question prompt... ▼

Your answer

Security Question 5

About Security Questions

Security questions are used in the event you forgot your account password or wish to change your existing password. EDMS will also ask you to answer a randomly chosen security question when submitting certain types of applications and reports.

Resetting Security Questions

Contact EDMS support if you need to reset your Security Questions.



Account creation (eSigning)

The screenshot displays the 'User Profile' page for 'Ryan Peterson' in the EDMS (Environmental Data Management System). The page is divided into several sections:

- Contact Information:** Fields for First Name (Ryan), Last Name (Peterson), Display Name (Ryan Peterson), Organization or Company Name (State of Alaska Department of Environmental Conservation), and Phone Number.
- Account Settings:** Fields for Login Name (ryansnewtest), Email Address (ryansmyalaskatest@gmail.com), and Notification Delivery Preference (Deliver in System and via Email). A red asterisk indicates that the email address is a required field.
- Edit Profile:** A button labeled 'Edit Profile' with a red arrow pointing to it.
- Change Password:** A button labeled 'Change Password'.

The user's name 'Ryan Peterson' is circled in red in the top right corner of the page, and a red arrow points to the 'Edit Profile' button.

If properly setup, first name and last name will be pre-populated. If it shows your email address, you must go to "Edit Profile" and add that information!





ED NAVIGATION (INTERNAL)

Ed navigation and terminology

Remember the first time you operated an excavator or a car? Becoming familiar with the options and terminology is very important! Deep breath, Don't Panic, this shouldn't take to long.

The screenshot shows the EDMS interface for a user named 'ryan.peterson'. The navigation menu on the left includes: Home (2), Dashboard (3), Notifications, Details, Start a New Form (4), Submissions (5), Evaluations, Documents, and Authorized Users (8). The main dashboard area shows a site selection dropdown set to 'April 11th Test Sub L1 B1'. Below this, there are two sections: 'HIGH PRIORITY' and 'UPCOMING', both displaying 'No items'. The top navigation bar includes links for Home, About, Contact, Sign Out, and Alaska DEC Home.

EDMS based concepts
"Sites" – Basis of system.
Facilities, persons, etc.
"Form Types" – E.g., submittal
types. Applications, Permits,
Schedules, Service Request

1. Selected "Site".
2. Home page of the "Site"
3. "Site" dashboard [note bold highlighted]
4. A place to start a new form
5. Submissions history on a site.
6. Dashboard of items needed on a site
7. User "Profile & Settings"
8. Authorized Users "add new users"

Many buttons can be redundant;
however, nice to get where you
are going many different ways.

Click around and provide
feedback!



Available forms

Forms for “Onsite Wastewater Registration”

1. 24hr Notice of Onsite Wastewater System or Part 1 of the Documentation of Construction Application Form
 1. On receipt, a Document of Construction – Part 2 Schedule form becomes immediately available
 2. Always available on the site, a 24 hr notice cancellation Service Request form is available
2. Onsite Wastewater System After the Fact Registration (Registered Engineers only but this is the form they’ll use)

Forms for “Certified Installers”

1. Certified Installer Registration (Initial) Application Form
2. Certified Installer (Renewal) Permit Change Form
3. Certified Installer 2nd Annual Installment Schedule Form
4. Certified Installer (Change of Employment Contractor) Permit Change form

(All) ▾

Home
Dashboard
Notifications
Start a New Form
Submissions
Permits
Evaluations
Financials
Documents

< BACK

Apply for a New Permit, License, or Entrance into a Program

Displaying 2 of 37 Application forms

24hr Notice of Onsite Wastewater System or Part 1 of the Documentation of Construction
Form Description: 24 hour notification for wastewater disposal systems that do not require a plan review or permit prior to construction. Part 1 of the Documentation of Construction process.
Program Area: Onsite Wastewater Registration

Onsite Wastewater System After the Fact Registration
Form Description: After the Fact Registration OWS
Program Area: Onsite Wastewater Registration

(All) ▾

Home
Dashboard
Notifications
Start a New Form
Submissions
Permits
Evaluations
Financials
Documents

< BACK

All Forms

Displaying 1 out of 38 Application Forms

Certified Installer Registration (Initial)
Form Description: Initial Certified Installer Registration for first time applicants. For installers that have been previously Certified, please use form of the same name with "Renewal"
Program Area: Certified installers

Displaying 2 out of 2 Permit Change Forms

Certified Installer Registration (Change of Employment/Contractor)
Site Name: Ryan Peterson, Department of Environmental Conservation, Permit Number: CI#2501 v1.0
Form Description: CI - Change of Employment Status
Program Area: Certified installers

Certified Installer Registration (Renewal)
Site Name: Ryan Peterson, Department of Environmental Conservation, Permit Number: CI#2501 v1.0
Form Description: Certified installer Registration (Renewal)
Program Area: Certified installers



PART 2

LIVE DEMOS

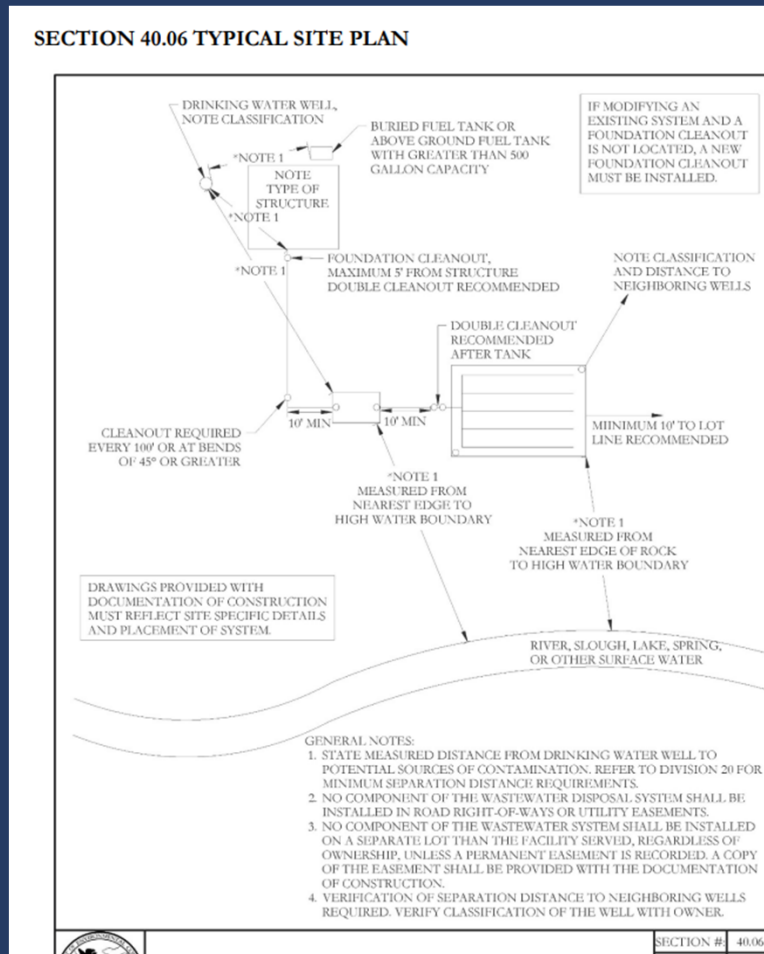
Part 2: live demos

- Submitting 24-hour notifications
- Submitting a Documentation of Construction
- Certified Installer Forms
- Notes on Documentation of Constructions

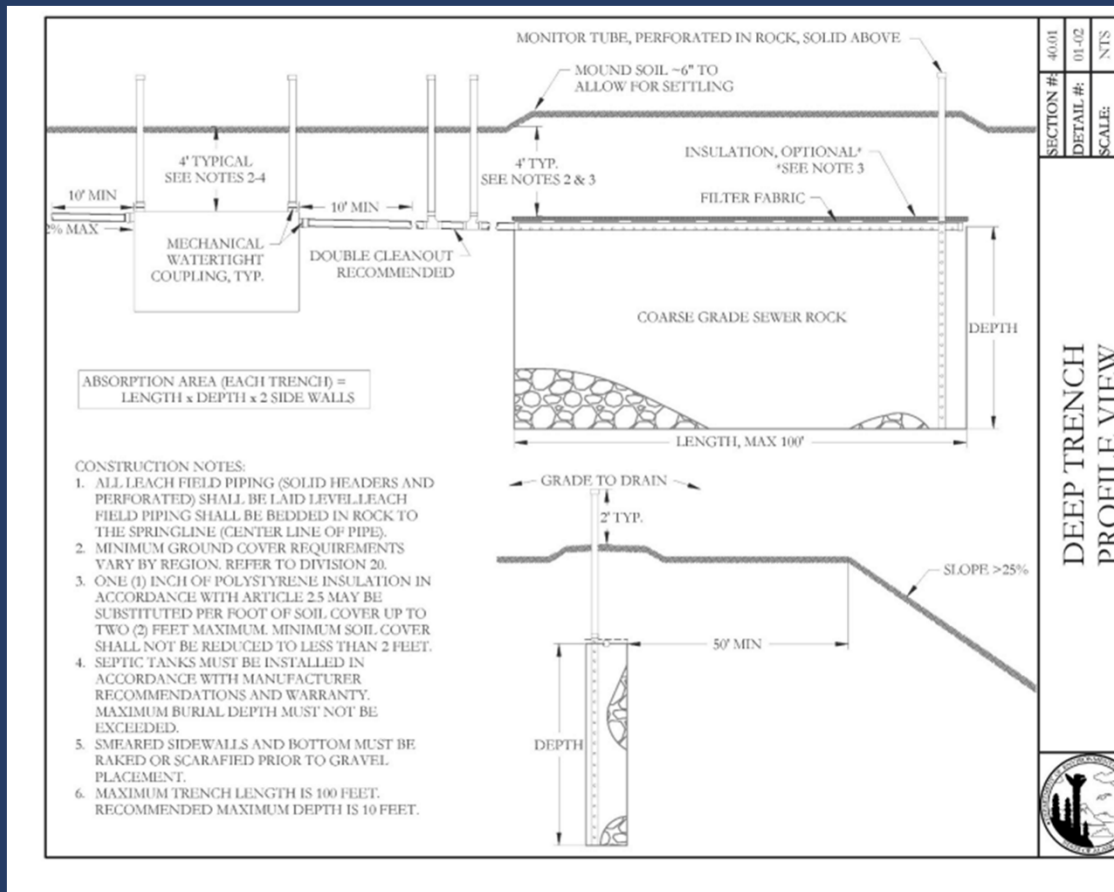


Documentation of Construction Requirements

OWSIM Appendix C



Documentation of Construction Requirements



Documentation of Construction Requirements

Legal Description: _____ Installer Name: _____ Date Installed: _____

Part IV. System Profile View Diagram

Instructions for Diagram: (use space below or attach additional sheets as necessary; engineers may attach separate sealed record drawings)

1. In a PROFILE VIEW of the entire septic system (from foundation cleanout to disposal field), identify and label the following: Original Grade (major grade changes) Final Grade Soil Cover and Insulation Sewer Lines Sewer Line Junctions (if applicable) Slopes/Drops of Sewer Lines Cleanouts and Monitor Tubes Lift Station/Sump Septic Tank(s) Soil Absorption System Filter Fabric

Legal Description: _____ Installer Name: _____ Date Installed: _____

Part III. Plan View Diagram

Instructions for Diagram: (use space below or attach additional pages as necessary; engineers may attach separate sealed record drawings)

1. In a PLAN VIEW, identify and label all of the following: On Lot Drinking Water Source Waterline(s) Surface Water Septic Tank Soil Absorption System Fuel Tank(s) (identify above or below ground and size) Property Line(s) Testhole All Sewer Lines and Perforated Pipe All Cleanouts and Monitor Tubes All Structures Slopes >25% and >10 feet in height Closest Well on Adjacent Property (identify classification) Closest Septic Tank and Soil Absorption System on Adjacent Properties

2. In the PLAN VIEW, label the horizontal separation distances, to the nearest half foot, between well(s), water lines, and surface water high water boundary to all potential sources of contamination listed above in accordance with Section 40.06 Typical Site Plan in the Onsite Wastewater System Installation Manual. Label separation distance between soil absorption system and slopes exceeding 25%. Label the size of each septic system component using appropriate units. Identify fittings used at bends and junctions.

Legal Description: _____ Installer Name: _____ Date Installed: _____

Part V. Soil Absorption System Cross Section View Diagram and Testhole Log

Instructions for Diagram: (use space below or attach additional sheets as necessary; engineers may attach separate sealed record drawings)

1. In a CROSS SECTION VIEW of the soil absorption system identify and label the following: Soil Absorption Medium Final Grade Original Grade (major grade changes) Filter Fabric Monitor Tubes Soil Cover and Insulation Drainfield Pipe Depth of Sewer Rock and Sand Liners, if applicable, in the Soil Absorption System Vertical Separation Distance Between Soil Absorption System and Groundwater/Impermeable Soils

2. In the CROSS SECTION VIEW, the system drawing should be vertically to scale and correspond to the depth indicated by the testhole log. Indicate soil(s) type, groundwater, and impermeable soils encountered in testhole.

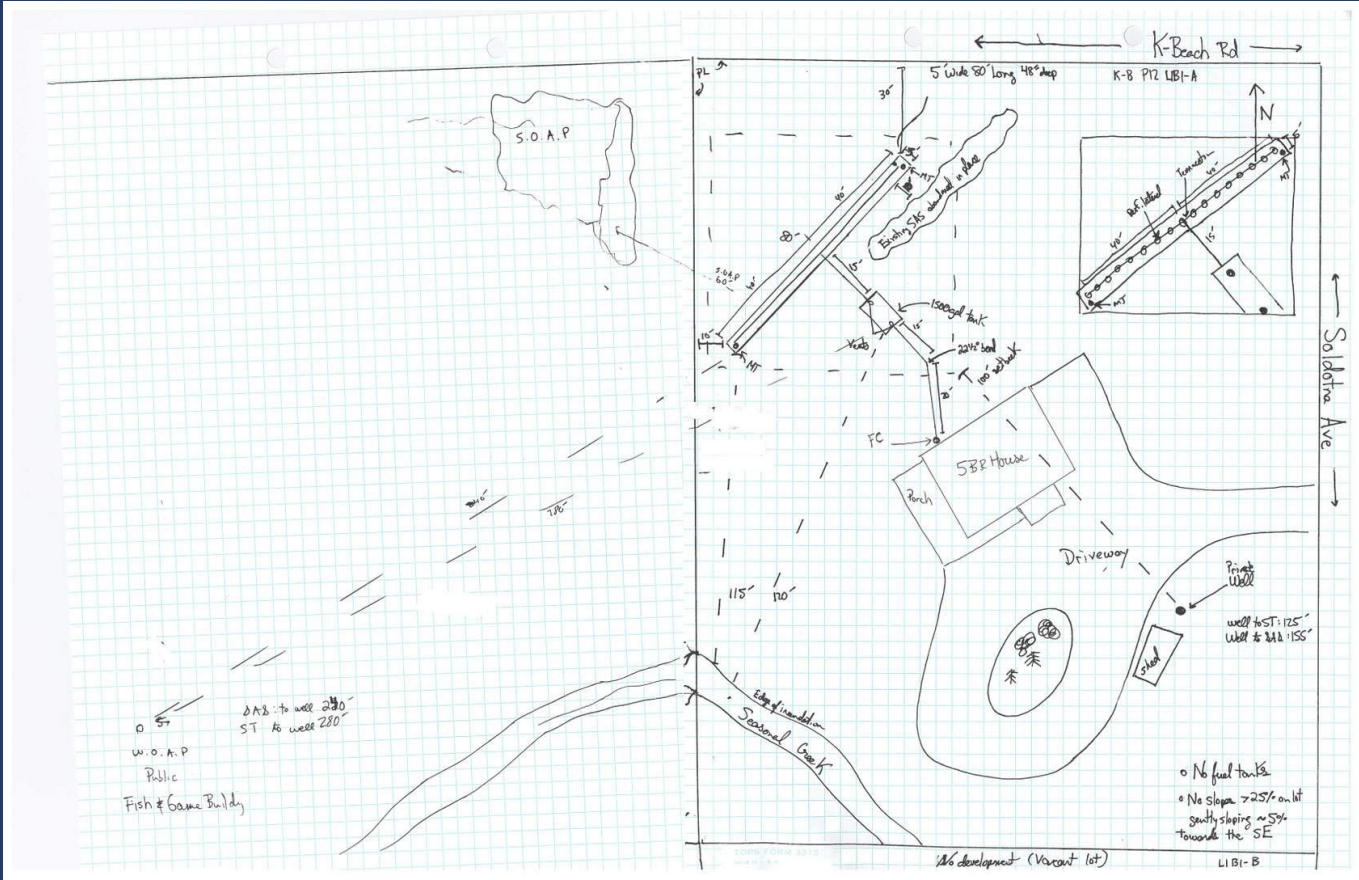
Groundwater/Seeps: Yes No At (feet below original grade): _____

Impermeable Soils (Clay/Bedrock/Permafrost): Yes No At (feet below original grade): _____

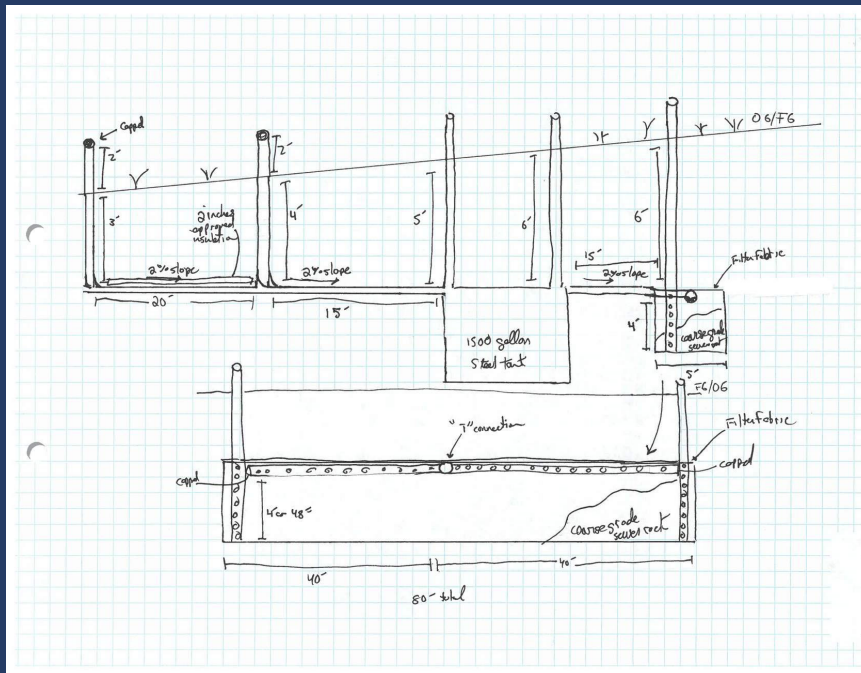
Testhole Log	Soil Absorption System Cross Section	
Testhole Inspected By:	+5 ft	
	+4 ft	
	+3 ft	
Date:	+2 ft	
	+1 ft	
Original Grade	0 ft	
	1 ft	
	2 ft	
	3 ft	
	4 ft	
	5 ft	
	6 ft	



Documentation of Construction Requirements



Documentation of Construction Requirements



Legal Description: K-B NLP12 LIB1A Installer Name: Ry Peterson Date Installed: 4/14/21

Part V. Soil Absorption System Cross Section View Diagram and Testhole Log

Instructions for Diagram: (use space below or attach additional sheets as necessary; engineers may attach separate sealed record drawing)

- In a CROSS SECTION VIEW of the soil absorption system system identify and label the following: Soil Absorption Medium Final Grade Original Grade (major grade changes) Filter Fabric Monitor Tubes Soil Cover and Insulation Groundfield Pipe Depth of Sewer Rocks and Sand Liners, if applicable, in the Soil Absorption System Vertical Separation Distance Between Soil Absorption System and Groundwater/Impermeable Soils
 - In the CROSS SECTION VIEW, the system drawing should be vertically to scale and correspond to the depth indicated by the testhole log. Indicate soil(s) type, groundwater, and impermeable soils encountered in testhole.
- Groundwater/Sleep: Yes No At (feet below original grade): 2.0'
- Impermeable Soils (Clay/Bedrocks/Permafrost): Yes No At (feet below original grade):

Testhole Log Soil Absorption System Cross Section

Testhole Inspected By:	+5 ft	
REP	+4 ft	
Date:	+3 ft	
4/1/21	+2 ft	
Original Grade	+1 ft	
OL	0 ft	
	1 ft	
	2 ft	
	3 ft	
	4 ft	
SP	5 ft	
	6 ft	
	7 ft	
	8 ft	
	9 ft	
	10 ft	
	11 ft	
	12 ft	
	13 ft	
	14 ft	
	15 ft	
	16 ft	
	17 ft	
	18 ft	
	19 ft	
	20 ft	
	21 ft	
	22 ft	

Documentation of Construction Form

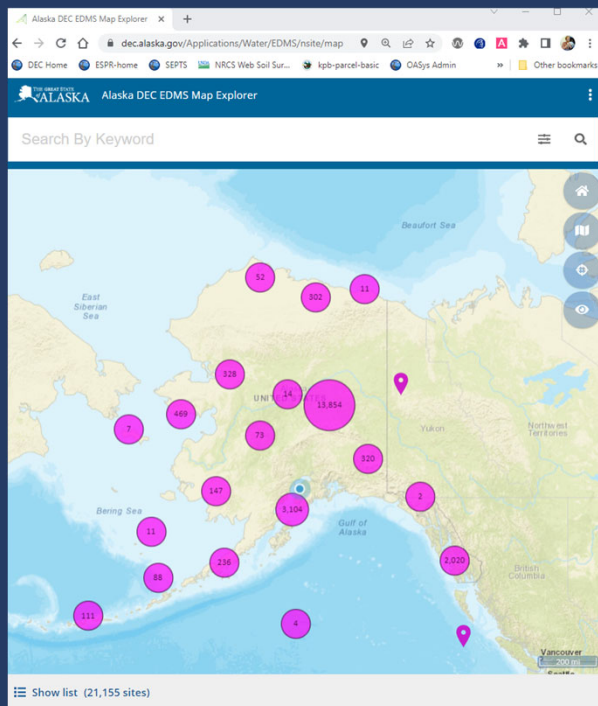
all previous versions obsolete, Effective April 1, 2020



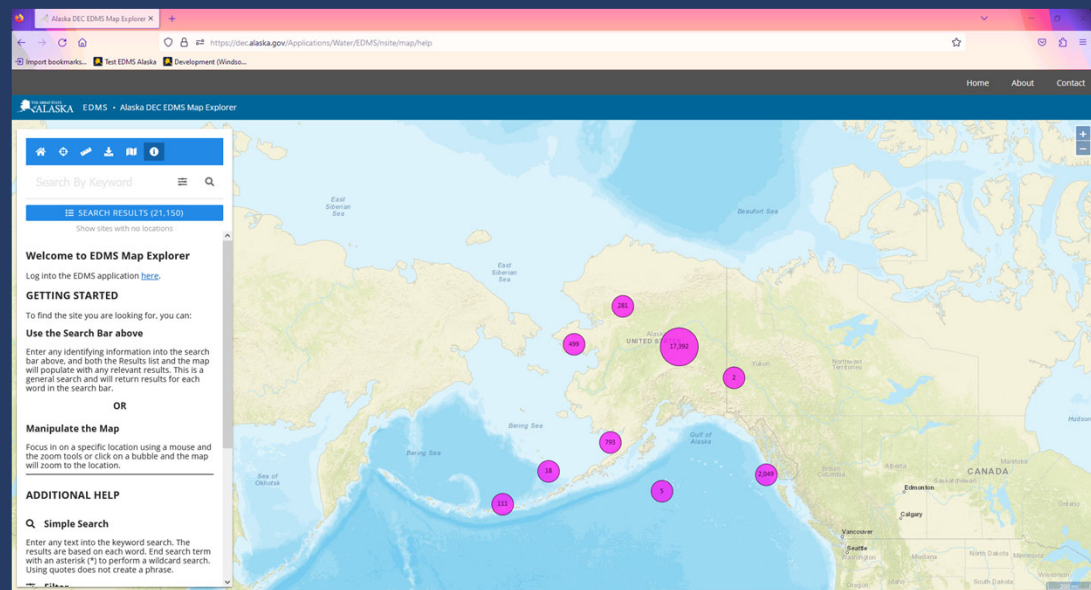
MAP SEARCH NAVIGATION

Septic.Alaska.gov

Use “Find Documentation on your system EDMS Database”



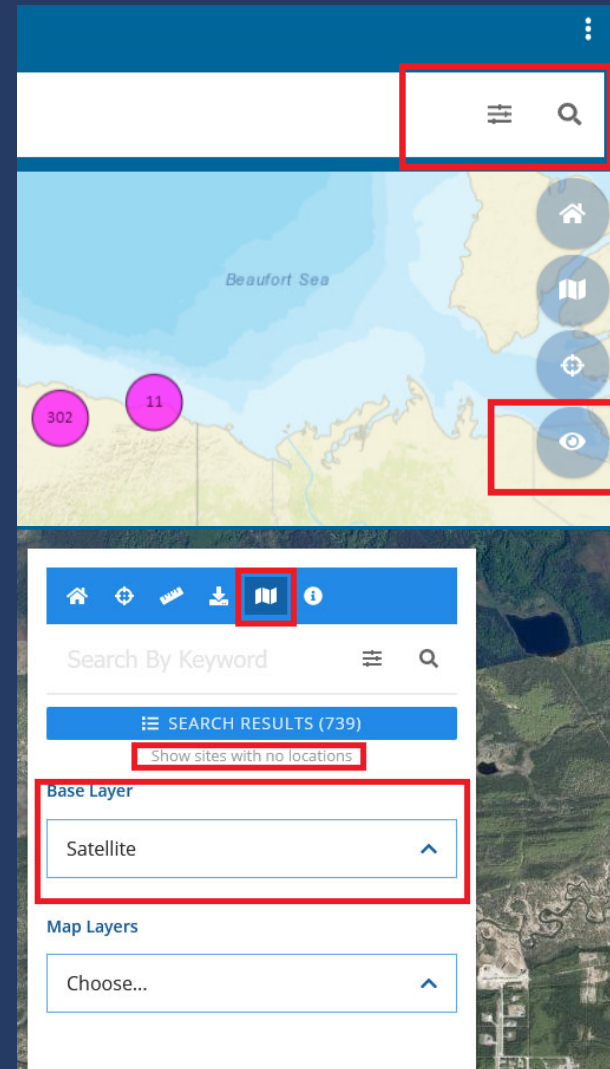
EDMS Map on a “Smaller” monitor



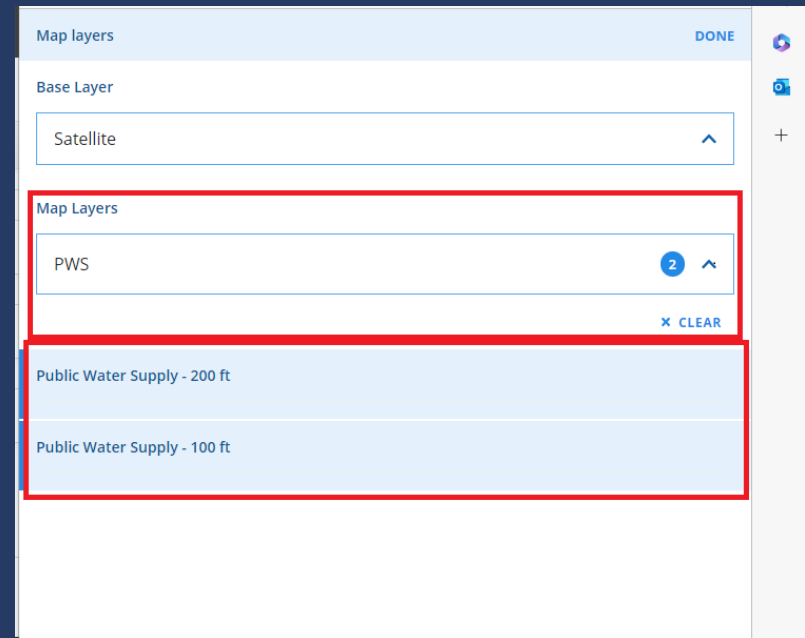
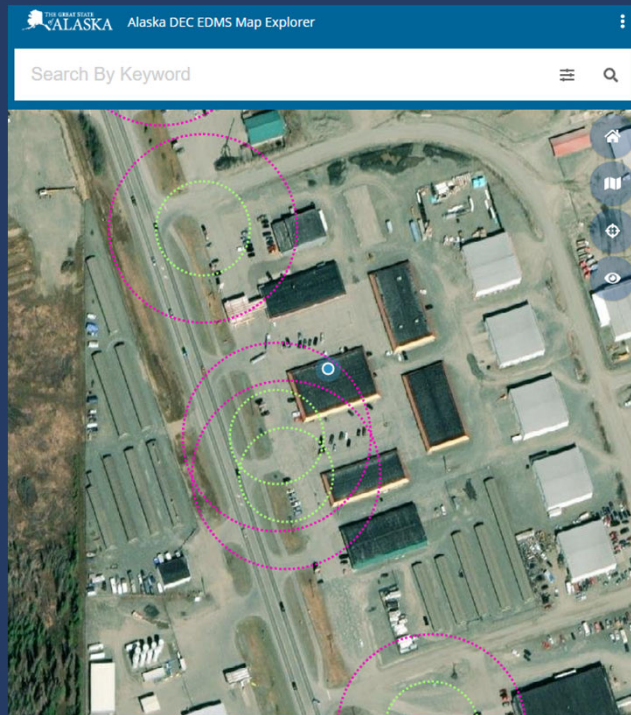
EDMS Map on a large monitor/screen



- For SEPTS DOCS use the “Eyeball Looking Icon” or “Show sites with no locations”. Currently, of the 66,791 Documentation of Construction records, only 12,912 have a latitude/longitude data inputted so far.
- Search by Keyword allows users to search by an index list of multiple items all at once including “Legal Description or the site name” and “Physical Address”.
- To view satellite imagery during searching, please select the 3 pane window and change the base layer to “Satellite”



- To show public water systems (PWS) on the map select “Map layers” and scroll to “PWS” and select.
 - Important, you must click on layer item for it to show on the map! It should be highlighted
- Hit done on the top of the map and nearby pws’s are shown!



- Ed is shared by the entire Division of water and as such there are multiple programs.
- recommended To limit the results you want to see to only Documentation of Constructions and onsite systems you will need to apply a “filter”
- Click the three lines next to the magnifying glass, click “filters”, click the “^” symbol and select the boxes “Onsite wastewater registration” and “Wastewater plan Review”

The screenshot displays the Alaska DEC EDMS Map Explorer interface. At the top, it says "THE GREAT STATE OF ALASKA EDMS • Alaska DEC EDMS Map Explorer". Below the header is a search bar with "Search By Keyword" and a magnifying glass icon. To the right of the search bar is a menu icon (three horizontal lines). Below the search bar, a box indicates "71,961 sites found" and "Hide sites with no location". Two filter tags are visible: "Onsite Wastewater Registration" and "Wastewater Plan Review". The main content area shows a list of sites, including "Evergreen Estates S/D Lot 11 Blk 5", "Glacier Bay Natural Foods", "Kelly Park Sub L6 B1", "Questa Woods Estates Sub No 6 L7B", and "Shadowmere Estates Phase I L2 B3". On the right side, an "Advanced Search Criteria" panel is open, showing "CRITERIA (0)" and "FILTERS (2)". The filters include "ProgramArea" (2), "Certified Installers" (0), "Cruise Ships" (1), "Domestic/Industrial" (1), "Mining" (0), "Oil and Gas" (1), "Onsite Wastewater Registration" (66,791), "Seafood" (3), "Stormwater" (4), "Wastewater Plan Review" (5,170), "Borough", "Permit Type", and "SiteType". Red boxes highlight the menu icon, the filter tags, the "ProgramArea" filter, and the "Onsite Wastewater Registration" and "Wastewater Plan Review" filters.



Zoom into an area to find nearby subdivision names and/or look at recently installed wastewater system documentation! Toggle between “show sites with no locations” to view the rest of the subdivision information

Search By Keyword

12 sites found
Show sites with no locations

Onsite Wastewater Registration ✕

Wastewater Plan Review ✕

Stoneridge Heights L15A B4 - WWDS #2 - South Unit
3020 N CAMBAY CT
Wasilla AK

Stoneridge Heights L15A B4 - WWDS #1 - North Unit
3020 N CAMBAY CT
Wasilla AK

Ravenview Addition #1 L8 B6
835 W SARAHS WAY
Wasilla AK

Ravenview Addition #1 L8 B6
835 W SARAHS WAY
Wasilla AK



Additional Important Notes:

- Continued from last slide

The screenshot displays the Alaska DEC EDMS Map Explorer interface. At the top right, there are navigation links for Home, About, and Contact. The main header includes the Alaska state logo and the text 'EDMS • Alaska DEC EDMS Map Explorer'. On the left side, a search bar contains the text 'Ravenview Addition'. Below the search bar, a notification indicates '1,820 sites found' and provides a link to 'Hide sites with no location'. A list of search results is visible, including several entries for 'Ravenview Addition #1' with various site identifiers (L5 B7, L1 B6, L1 B7, L8 B6, L11 B7) and addresses in Wasilla, AK. The main area of the interface is an aerial map showing a residential neighborhood with several sites marked by pink circles. A scale bar at the bottom right of the map indicates 200 feet.



To view onsite wastewater information

- You may click on the tear drop symbol, or the site name on the left of the screen to open the site. For smaller monitors the, the menu that shows this list is at the bottom and doesn't show at the same time as the map icons.
- Once open you can click "Show more information" or select

The screenshot displays the Alaska DEC EDMS Map Explorer interface. On the left, a sidebar shows a list of sites under the heading "Stewardship Sub 2021". One site is highlighted with a red box: "Stewardship Sub 2021 Replat Lot 5" at "34546 Business Park Frontage Rd, Soldotna AK 99669". Below this is another site: "Stewardship Sub 2021 Replat Lot 4" at "34504 Business Park Frontage Rd, Soldotna AK 99669". At the bottom of the sidebar, a button labeled "Show list (4,126 sites)" is highlighted with a red box. The main map area shows an aerial view of a site with a red pin. On the right, a detailed profile for "John Castons Industrial Park Sub No 5 Tract D1 44440 Kalifornsky Beach Rd AK" is displayed. The profile includes tabs for "PROFILE", "MAP", "ENVIRONMENTAL INTERESTS", and "DOCUMENTS". The "ENVIRONMENTAL INTERESTS" tab is active, showing a "Document of Construction (Migrated) - Onsite Wastewater Registration" with an installation date of 01/01/2016. Other fields include "SOURCE SYSTEM" (Environmental Data Management System), "SOURCE SYSTEM ID" (SeptsKey-78123), "Site Contacts" (Responsible Installing Party: Dustin Norris), and "Alternate Names" (College Heights Baptist Church). A "SHOW LESS INFORMATION" button is visible at the top right of the profile.



Electronic Resources

- Borough Parcel Viewers
- Borough / Department Soil Records
- Web Survey Home
- DEC Records in the Office



USDA Soil Survey

<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us | Subscribe | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help

Area of Interest (AOI) | **Soil Map** | Soil Data Explorer | Download Soils Data | Shopping Cart (Free)

Printable Version | Add to Shopping Cart

Search

Map Unit Legend

Western Kenai Peninsula Area, Alaska (AK652)
Western Kenai Peninsula Area, Alaska (AK652)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
563	Gravel pits	1.1	0.1%
626	Naptowne silt loam, 8 to 15 percent slopes	51.0	5.3%
652	Slikok peat, 0 to 4 percent slopes	7.5	0.8%
653	Slikok peat, 4 to 8 percent slopes	4.0	0.4%
662	Soldotna silt loam, 15 to 25 percent slopes	25.1	2.6%
663	Soldotna silt loam, sandy substratum, 4 to 8 percent slopes	20.0	2.1%
664	Soldotna silt loam, sandy substratum, 8	41.6	4.3%

Soil Map



Technology Resources

Drones



“Newer” Technology Resources

Smart Phone Applications such as PDF Scanner tools, location and measurement applications

Handheld distance measurements



Comments & Questions?

- There are many additional search features capabilities of the new system. This highlights the ability to search for recent installations with an inputted latitude/longitude.
- Don't be afraid to click around!
- You do not have to be logged in ed to search
- Future projects: Adding layers for soil/groundwater/impermeable soils!
- Department is aware of many sites located in odd locations!
- Comment: When Submitting a DOC with lat/Long, please put the point somewhere in the soil absorption system to take advantage of some of the new capabilities
- Comment: there are some quirks with the new system, for feedback or any questions feel free to contact ESPR staff at septic.Alaska.gov



Comments & Questions?

This session is recorded and can be rewatched later.

Smaller training videos and the learning module will be completed as time allows

If additional training is requested, additional sessions may be provided and/or please contact your local ESPR staff for questions



Thank You

- Ryan Peterson
- Ryan.Peterson@alaska.gov
- 907-262-3402
- Septic.Alaska.gov

