



Permitting Options in N.C.

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Media Filters



- Sand, Peat, Textile, Polystyrene, etc.
- Stable technology with generally very good results in our state.
- Alternative media systems 10+ years in NC.
- Nearly 400 AdvanTex systems
- Very few failures in spite of being used on the most marginal and difficult sites.



Permitting options

Let's run through an example.

Uebler Household



- 3 Occupants
- Installed in January of 1983
- System ran fine for 30 years.
- Began surfacing recently and have been unable to resolve.
- Dr. Bob approaches the LHD and tells them he needs a repair. They respond with....

Ok!



- Dr. Uebler is issued a repair permit for a conventional system.
 - System is installed and essentially forgotten about until it fails again.
- ...this is a story and a discussion for another day...

Ok! But...



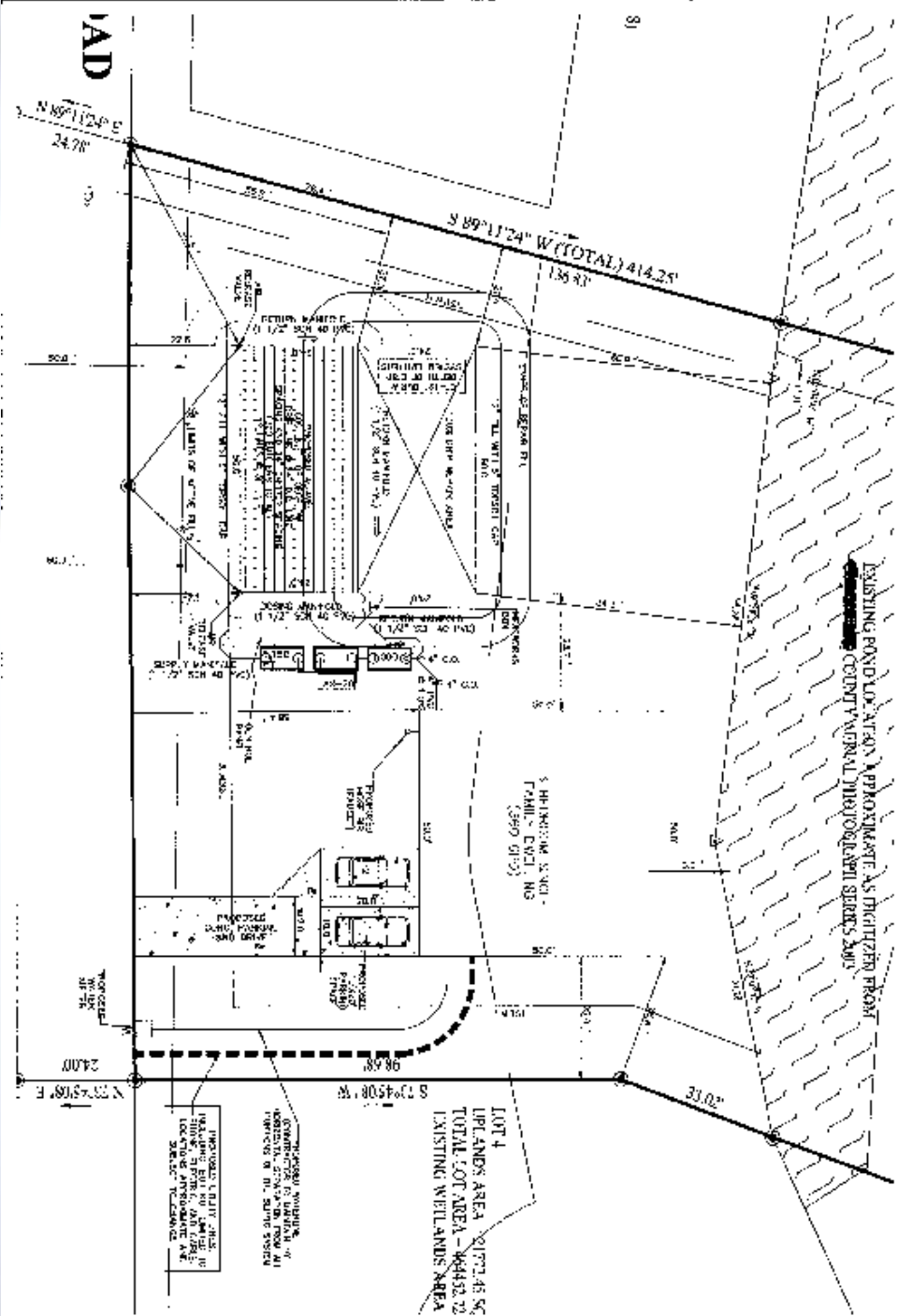
- The repair area is there but requires a TS-II System due to setback requirements.
- Here is the layout, and basic guidelines.



Sub Surface Permit

TSII Media System w/ UV

- Permitted at CHD Level
- ORC Required
 - 2 O&M Visits/Year
 - 1 Lab Sample/Year
- 1 CHD Inspection/Year
- Lab Criteria
 - <10 BOD
 - <10 TSS
 - <10 NH3
 - >60% TN Reduction
 - <1000 CFU
- Start-up inspections by licensed installer, manufacturer representative, CHD, and system designer



Or they may say...



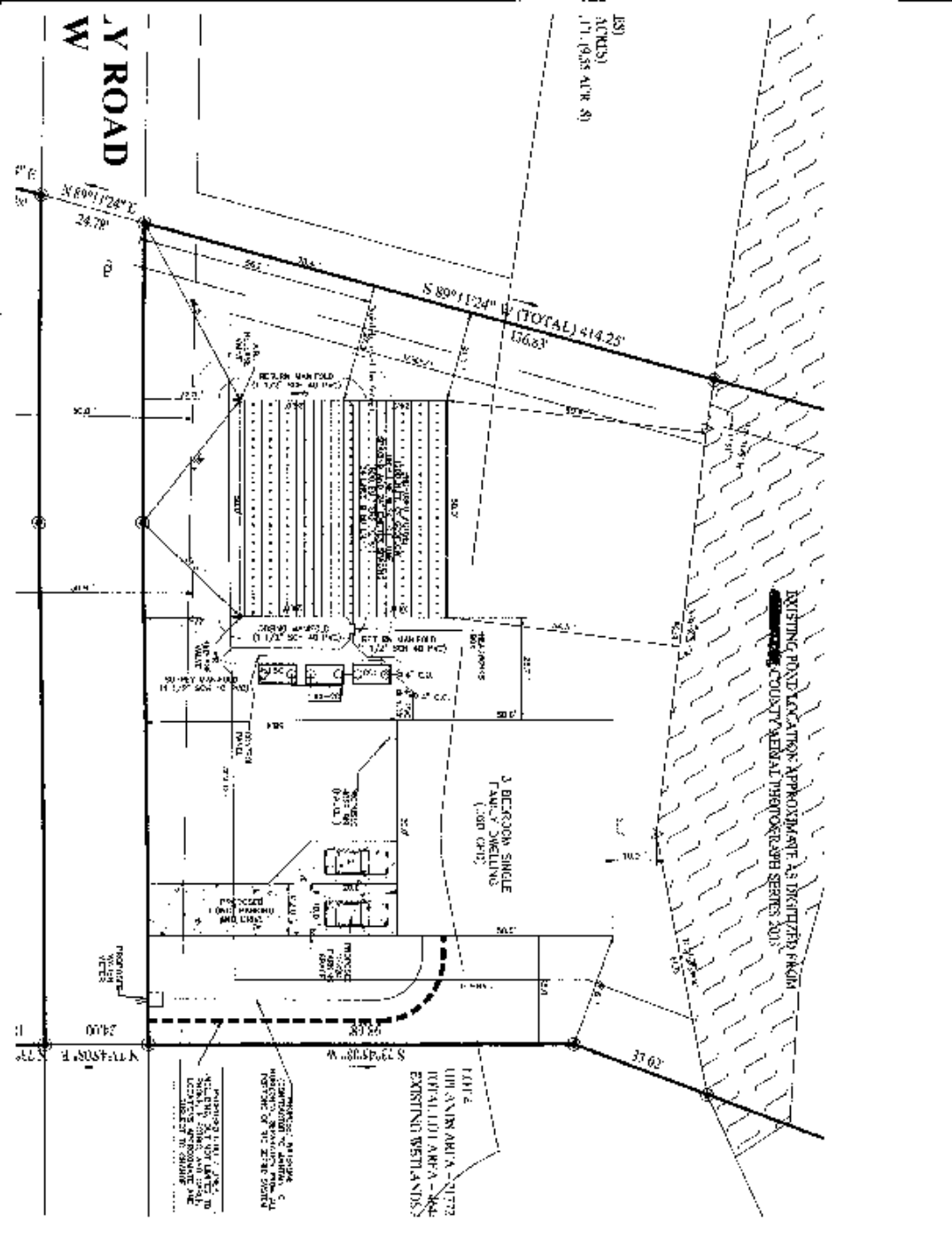
- Dr. Bob, sorry but we can't permit a repair. We will issue a denial and you can go to DWQ.
- DWQ will allow for a land application system, so here is that basic layout and requirements...



Land Application Permit

Media System w/ UV or Chlor/Dechlor

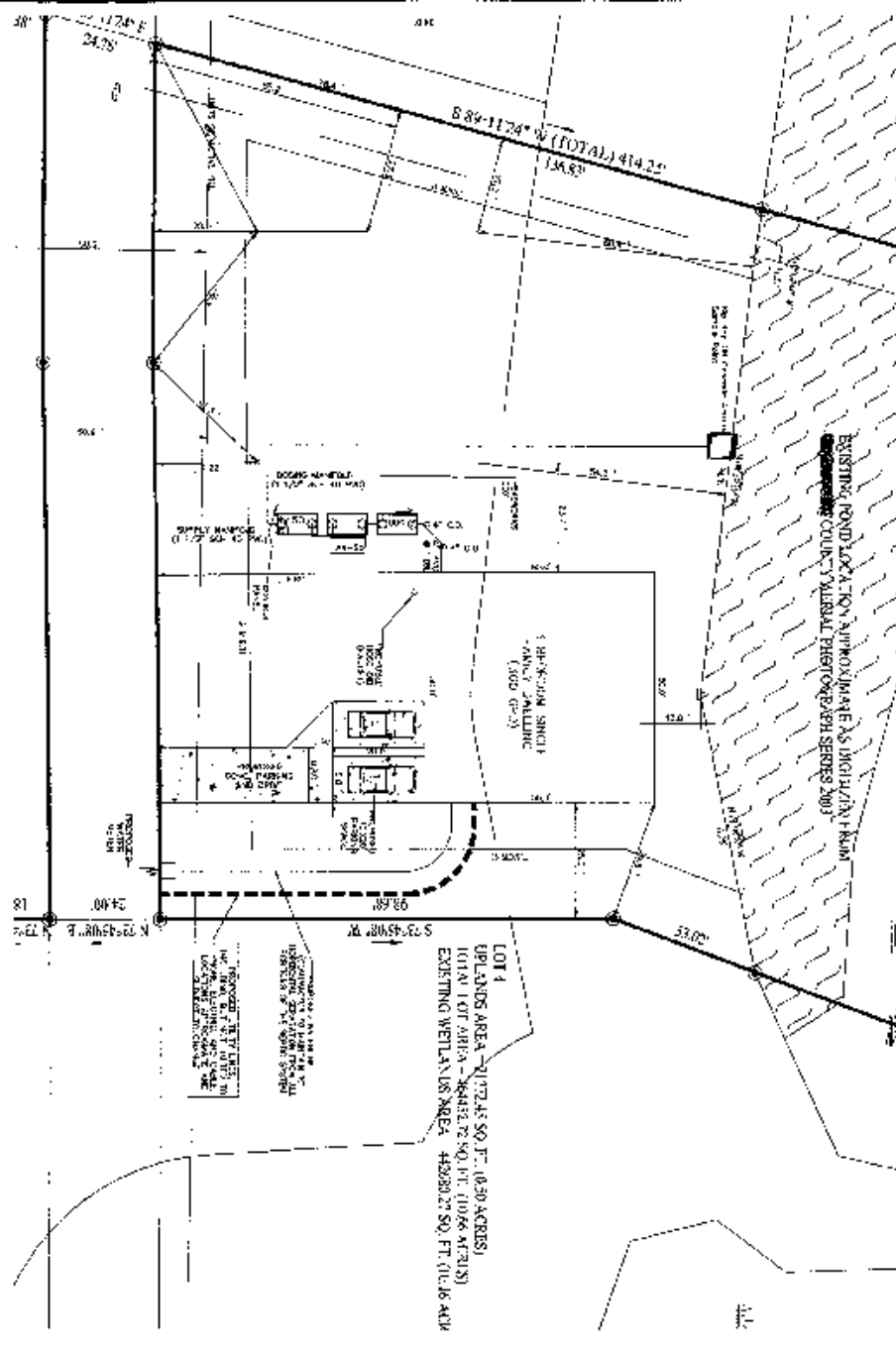
- Permitted at DWQ Level
- ORC Required
 - Permittee responsible for monthly drip, weekly UV, and annual tank inspections.
 - No reporting required.
- No required DWQ inspections.
- Lab Criteria
 - None required for approved technologies.
- Engineer must certify the system is installed properly.



Or DWQ may say...



- You don't have the allowable setbacks for a land application permit, you will need to apply for a surface discharge permit (ie NPDES 55000)
- Here is the basic layout and requirements for this...

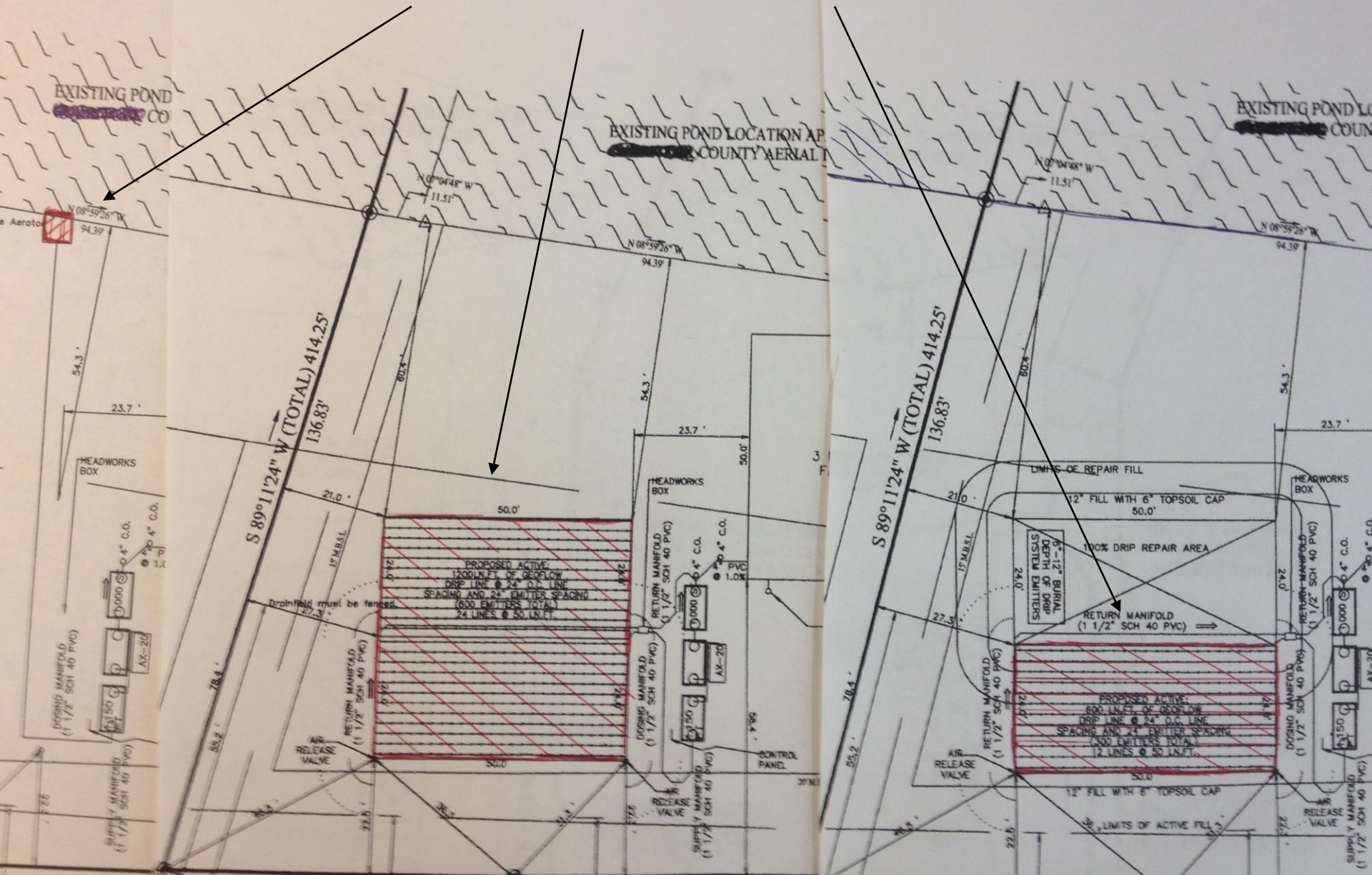


Direct Discharge Permit

Media System w/ UV or Chlor/Dechlor

- Permitted at DWQ Level
- No ORC Required
- No required DWQ Inspections
- Lab Criteria
 - <45 BOD
 - <45 TSS
 - <400 CFU
- Engineer must certify the system is installed properly.

Here you see each of our options.



Problems



1. Logical disconnect.
 - Sites with highest risk of exposure have the lowest operation, monitoring, and treatment requirements.
 - Why are we not using the land inside of the setback?
2. Multiple agencies/departments.
 - This is the same house in the same watershed, using the same technology.
 - Leads to confusion, frustration, and less compliance.



**Proposes change in
regulations.**

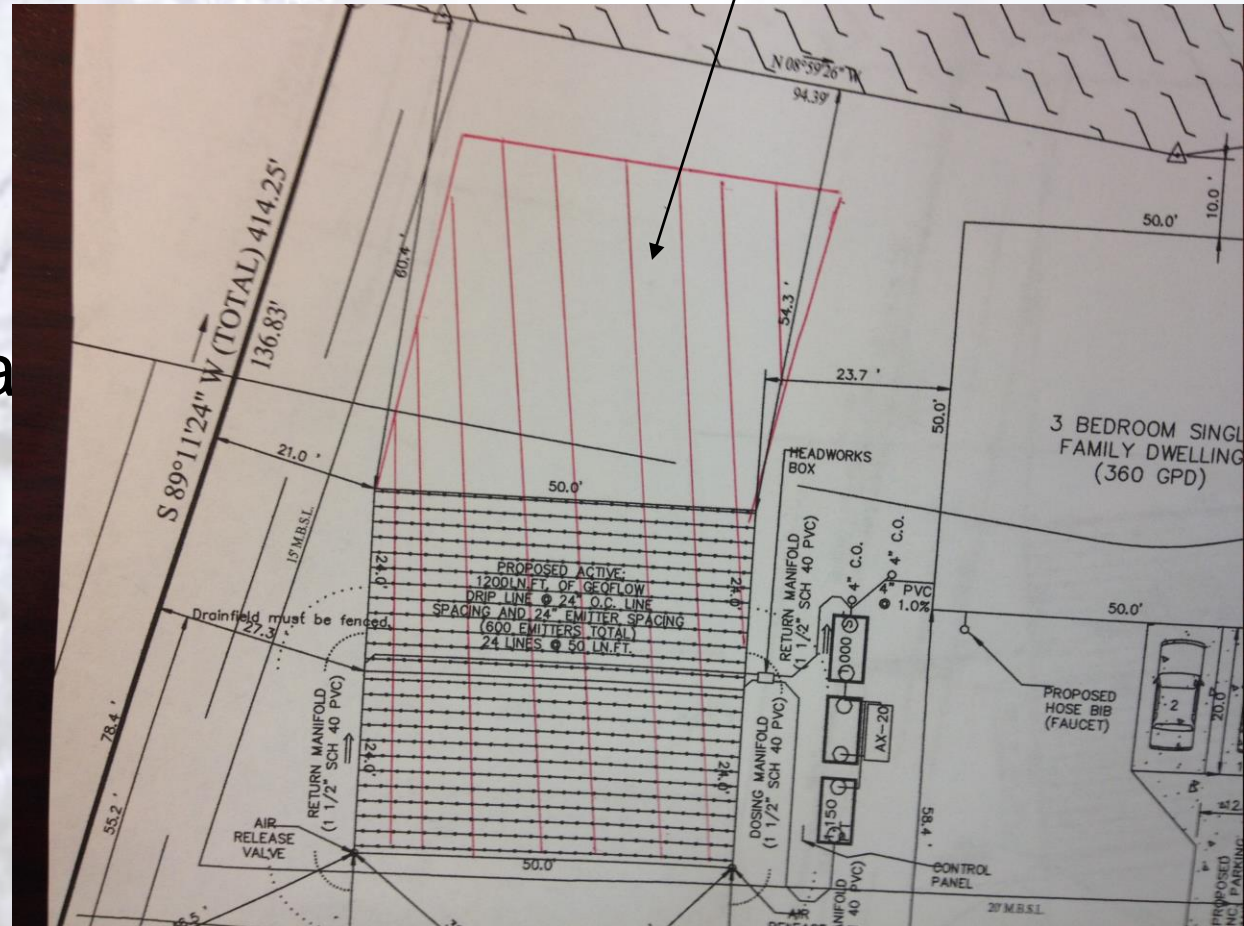
gets blacklisted...

Solutions



Use all of this space!

- Stop issuing or renewing direct discharge permits.
- Utilize all available area
- Use best technology available.
- Time dose!



Solutions



- Issue all onsite permits through the LHD's.
 - They are local.
 - They have the support of DHHS Onsite Water Protection Branch.
 - Technology review is always being done with the Innovative and Experimental Committee.
 - DWQ has bigger fish to fry.



Questions/Comments?

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A wide-angle photograph of a beach at sunset or sunrise. The sky is a mix of orange, yellow, and light blue. The ocean has gentle waves with white foam. The sand is wet and reflects the light from the sky.

**CHANGE IS
HARD**