The NPDES Phase II Storm Water Regulations

Regional Contacts

- Rockford - Chuck Corley (815) 987-7760
- Des Plaines - Chris Kallis (847) 294-4000
- Peoria - Jim Kammueller (309) 693-5463
- Champaign - Holly Hirchert (217) 278-5800
- Springfield - Bud Bridgewater (217) 786-6892
- Collinsville - Wayne Caughman (618) 346-5120
- Marion - Byron Marks (618) 993-7200

Regulatory History of the Program

- Phased approach was required by 1987 CWA Amendments
- Phase I – 1990 Federal Register - Addressed significant sources of runoff
- Construction sites, certain industries, certain communities (MS4)
- Phase II – 1999 Federal Register - Beginning March 10, 2003 construction sites that disturbed one acre or more were required to have coverage under the NPDES general permit for storm water discharges from construction site activities.

Phase II Rules

- All construction sites, including municipal projects, that disturb 1.0 acre or more are regulated. Sites < 1.0 acre may require permit. BOTTOM LINE – water quality compliance.
- Municipalities located in urban areas as defined by the Bureau of Census were required to obtain NPDES permit coverage for discharges from their municipal separate storm sewer systems (MS4s).
- Individual municipal projects covered under an MS4 do not need separate permits from IEPA
- Dual permits and inspections

Phase II Small MS4 Coverage

- Purpose of MS4 Programs – Require storm water controls at local level
- A Phase II - regulated small MS4 is any small MS4:
  - Located in an “urbanized area” as defined by the Bureau of Census
  - Designated by the IEPA

What Activities are Covered?

- **Construction activities – Any site development including roads, construction of residential buildings, office buildings, industrial sites, or demolition.**
- **Land Disturbance - Soil is exposed due to demolition, clearing, grading, or excavation activities**

Construction Permit Activity Before Construction

- Create a Storm Water Pollution Prevention Plan (SWPPP) or P2 Plan.
- Submit one-page Notice of Intent (NOI) to IEPA including the $500 application fee at least 30 days prior to the anticipated start of construction

Notice Of Intent
Key Items

These must be included on the NOI in order to avoid having to resubmit the form.

- Owner information
- SWPPP status.
- Receiving Water information
- Signature
- Date
- NOTE: Commitment is made that adequate SWPPP exists and will be properly implemented.

Construction Permit Activity Before Construction

- 30 Day mandatory review period
  - IEPA will post NOIs on website:

    www.epa.state.il.us/cgi-bin/wp/noi/noi.pl
  - Discharge is authorized 30 days after the date the NOI is post marked

Construction SWPPP

- The bottom line.
- Quality plan essential for compliance.
- Plan must be detailed and site specific.
- Plan must address entire project –ground breaking to final stabilization of last lot.
- Prepare plan per part IV of permit – download from IEPA web site.

Construction SWPPP

- Plan must address all areas that will be disturbed or become barren during life of project.
- Includes infrastructure work – water lines, sanitary sewers, storm sewers – all utilities, streets, curbs, gutters, storm sewer inlets, outfalls and receiving ditches. Stream banks, building sites, lots, slopes, dirt stockpiles, fill areas, etc.
- Keep copy of plan and reports on site.

Construction SWPPP

Must include (see Part IV of permit):

- **A description of the nature of the construction activity**
- **A description of the intended sequence of major activities which disturb soils for major portions of the site (demolition, clearing, grading & excavating)**

Construction SWPPP (cont'd)

- Estimates of the total area of the site and the total area to be disturbed by excavation, grading or other activities
- An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site

Construction SWPPP (cont'd)

- Site Map
  - Drainage patterns, approximate slopes anticipated before and after major grading activities.
  - Location of vehicle entrances/exits and controls to prevent offsite sediment tracking.
  - Areas of soil disturbance.
  - Major structural and nonstructural controls.

Construction SWPPP (cont'd)

- Site Map (continued)
  - Areas where stabilization practices will occur.
  - Surface waters (including wetlands), and locations where storm water is discharged to surface water.
  - Name of receiving water(s), the ultimate receiving water(s), and the areal extent of wetland acreage.

Construction SWPPP (cont'd)

- Controls
  - Erosion and sediment control
    - Stabilization practices
    - Structural practices: silt fence, sediment traps, storm drain inlet protection, etc.
  - Storm water management
  - Waste disposal

Scheduling The Work

- Adverse weather must be considered.
- Time and money. Profit vs. compliance.
- Potential bad choice - Initiation of earthwork in late fall.
- Disturbed ground in bad weather – major compliance issue.
- Pay now or pay later.

Overall Common Plan of Development

- The entire project. SWPPP must address.
- Minimum controls for building sites.
  - Silt fence around entire site.
  - Several rows on slopes.
  - Rocked access road to foundation.
  - Cover soil stockpiles – haul off excess ASAP.
  - Damage control by contractors and suppliers.
  - Sod is quicker than seed.

0-421-6559
9-694-6271

Who is Responsible For Compliance?

- Permit holder and/or landowner.
- Those causing site disturbance.
- Permit is for life of project until final stabilization is achieved (at least 70% permanent perennial grass cover).
- Developer can elect to have builders obtain permits.
- Would have to complete infrastructure work and achieve final stabilization. No building can occur. May take at least a year to achieve 70% density grass cover.
- Lot owners/builders must obtain own permits – SWPP.

Keeping The Permit

- Preferred method - developer can control entire project.
- Retain lots – control all building.
- Sell lots – SWPPP in sales contract.
- Certification statements from buyers/builders.
- Possible security payments.

Why SWPPP's Fail

- Lack of knowledge. Read Part IV of permit and guidance documents.
- Lack of effort to comply.
- Time and money – project delays-clients won't pay and consultants won't sell.
- One page grading sheets are not SWPPP.
- Contractor bids SWPPP as presented.
- Permit holder unwilling to pay for SWPPP updates
- Contractor won't pay – need cash reserve.

Construction SWPPP (cont'd)

- Developers/owners, contractors and subcontractors must sign the certification statement
- See page 6 of permit
- Maintain the SWPPP on site from the beginning of the project until completion

Construction Permit Activity During Construction

- Implement controls and Best Management Practices according to SWPPP
- Modify the document as conditions change
  - Design changes that affect storm water
  - Additional contractors/subcontractors responsible for SWPPP implementation

Construction Permit Activity During Construction

- Inspections - at least once every 7 days & within 24 hours of a storm event of one-half inch or greater, retaining inspection forms onsite
- Complete and submit Incidence of Noncompliance (ION) form when necessary

Construction Permit Activity After Construction

- Terminate permit when final stabilization has been completed by submitting a Notice of termination (NOT)
- Keep records for 3 years
- Permit coverage required until final stabilization achieved (developer, contractor(s), or home builder(s) may be the permit holder)

Construction Permit Activity After Construction

- Final stabilization is achieved when:
  - all land disturbing activities are complete,
  - uniform perennial vegetative cover with a density of 70 percent for unpaved areas and areas not covered by permanent structures has been established, or
  - equivalent permanent stabilization measures have been used.

What to Expect from an Illinois EPA or SWCD Site Visit

- Verification that a permit has been issued
- Verification that the SWPPP and the NOI or Notice of Coverage letter are on site
- Review of compliance with SWPPP, records of inspections, maintenance of controls
- Evaluation of the controls. Are they protecting the environment?

Agency Website & Contacts

- www.epa.state.il.us
- al.keller@epa.state.il.us

- **Permits Section telephone number: (217)782-0610**

www.epa.state.il.us

- All forms are available on the website
  - Notice of Intent (NOI)
  - Notice of Termination (NOT)
  - Incidence of Noncompliance (ION)
  - General Storm Water Permit

www.epa.state.il.us/water/permits/storm-water/construction.html

www.epa.state.il.us

- **Public Notice List of NOI Applicants:**

  http://www.epa.state.il.us/cgi-bin/wp/noi/noi.pl

- **Links to USEPA for information on BMPs**

WELCOME TO THE MUD SHOW

Problem:

- Erosion and sediment released from barren land where construction, agricultural, or industrial activities are occurring.
- Release can be a point or non-point source.
- One of the leading two causes of water pollution in Illinois.
- Sediment is the number one pollutant by volume.

Causes:

- No erosion control measures (methods, devices or structures) in place
- Inadequate measures in place and/or poor application of measures
- Inadequate maintenance of control measures in place

Inadequate controls and maintenance

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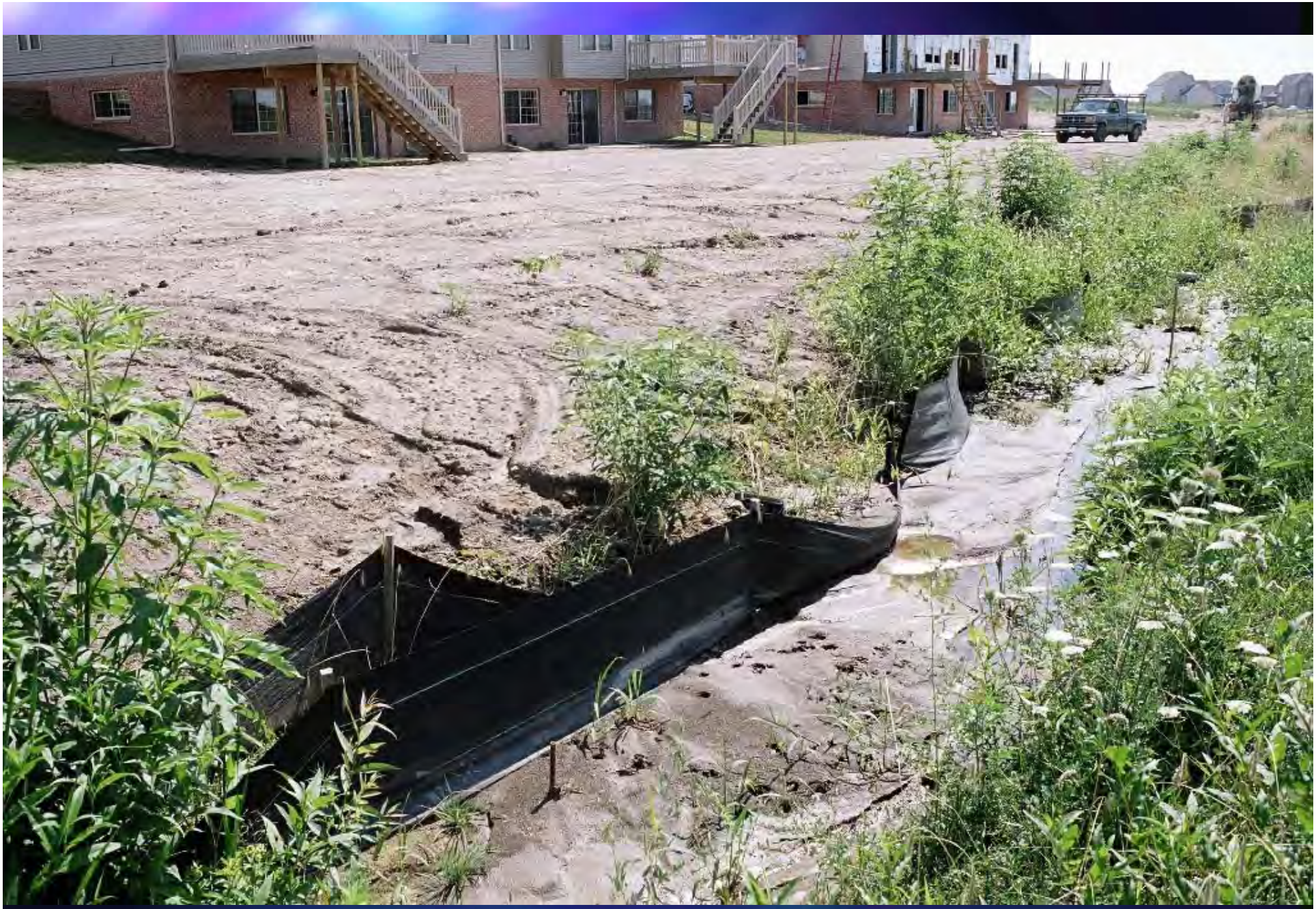
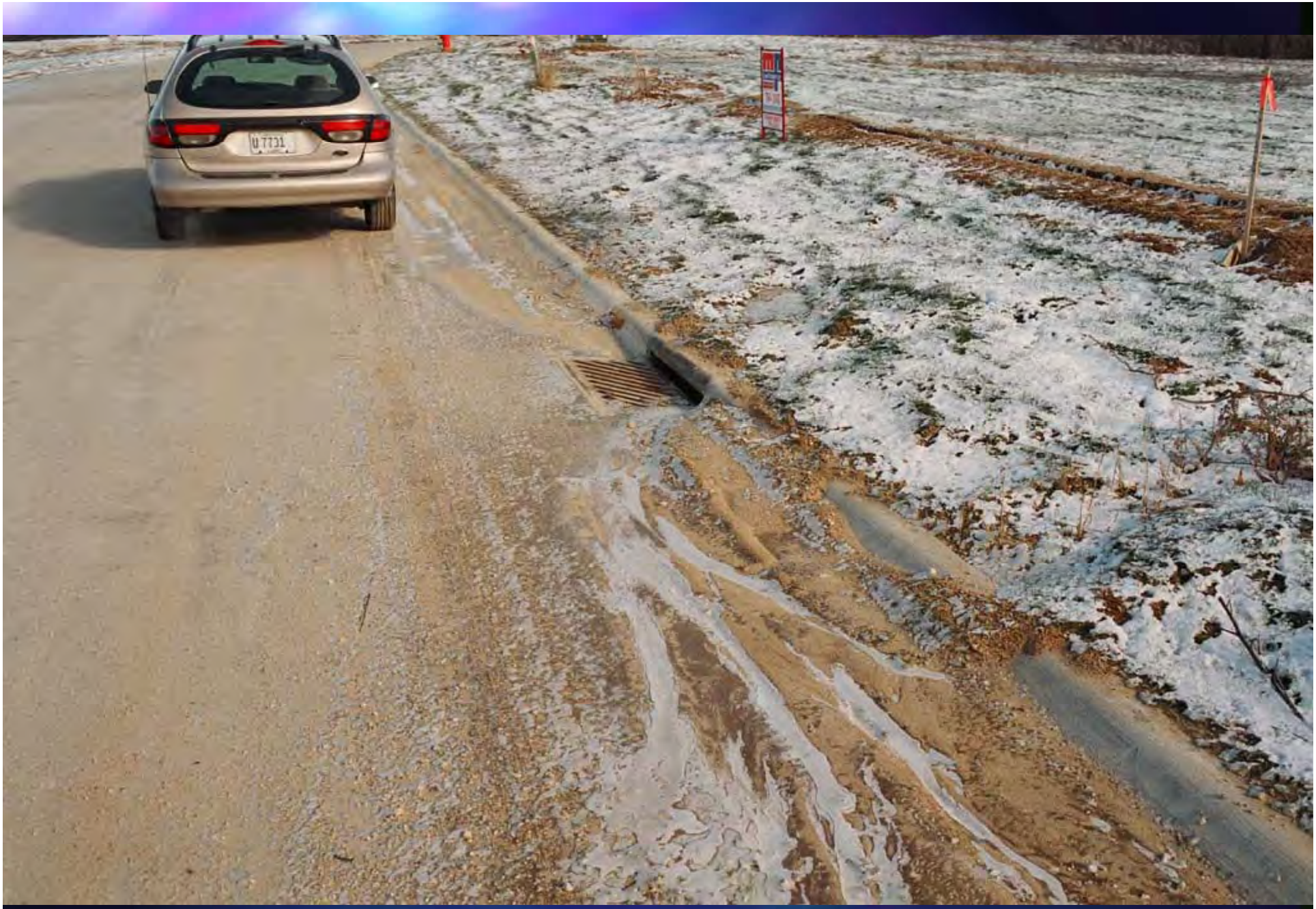


Sediment discharge to storm sewers

Source controls are needed to keep sediment out of streets



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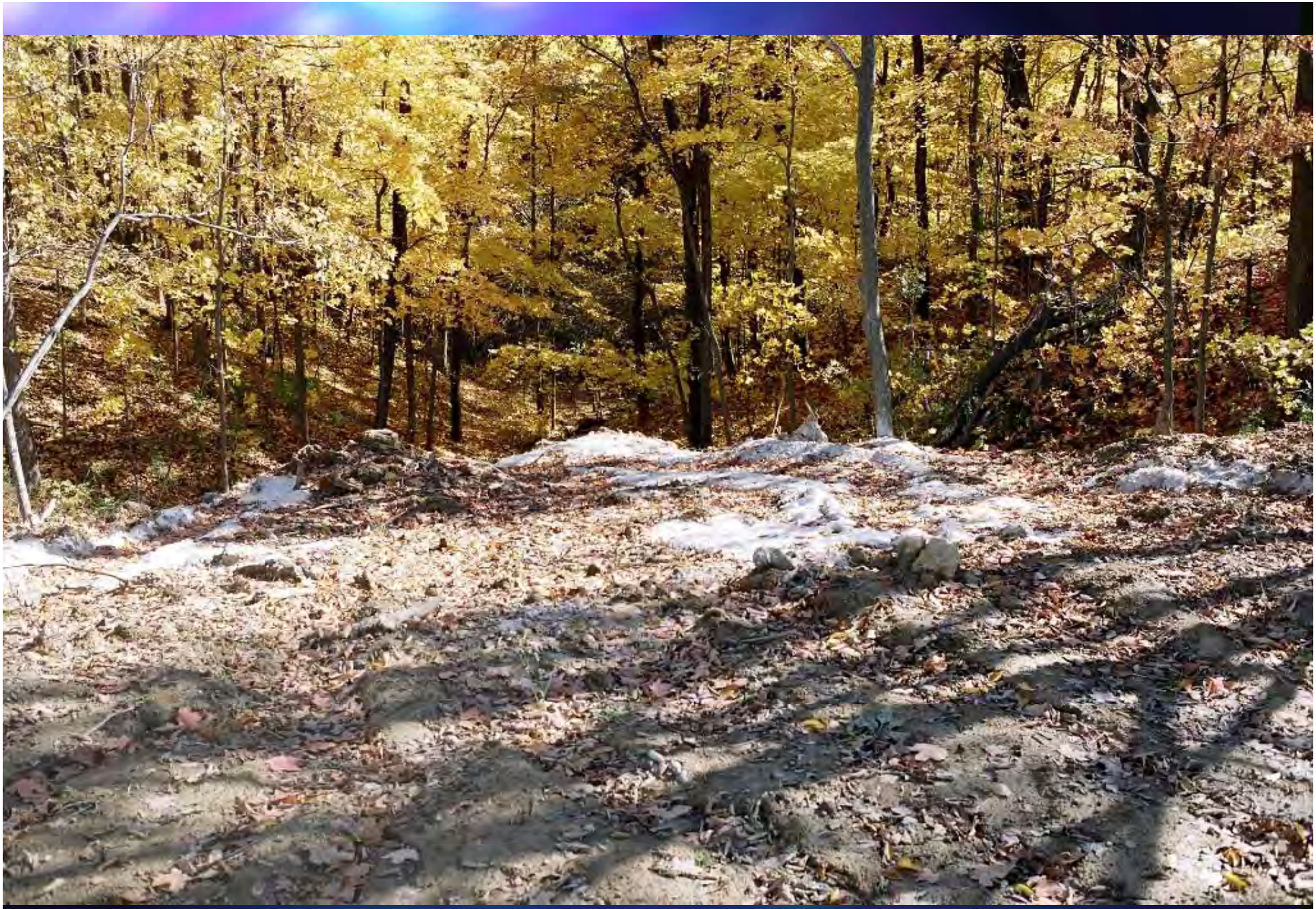
Waste Disposal



Slopes and hillsides

Seed and blanket immediately

Runoff diversion

Control Measures

TRLU 259723 2
US 2210

KINCAID
STRAW BLOWER

Selection and Description of Controls

- Plan for minimal land disturbance
- Consider site conditions, and weather
- Prevent run-on
- Slow down runoff
- Stabilize soils
- Trap sediment

Selection and Description of Controls

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Selection and Description of Controls

- Trap sediment

Selection and Description of Controls

- Prevent tracking of soil off-site

Finish the Job

- Final Stabilization
- Site clean-up

Communication

Talk to consultants and contractors

NO
PARKING
THIS
SIDE OF
STREET