Findings and Orders

Ohio’s Incentive Based Erosion & Sediment Control Construction Specification
Ohio’s Construction General Permit

- Requires the development of a SWPPP on Earth Disturbing Activities (1 Ac. and greater)
- Includes Post-Construction BMP requirements
  - Typically regulated through MS4 Permit
  - Ohio’s Post-Construction requirements are statewide
- Notice of Intent – filed with OEPA
  - No SWPPP plan reviews required – Except watershed specific permits
  - MS4 Permit addresses program level oversight
  - Requires development of SWPPP prior to submitting NOI – ODOT is exception (Memorandum of Understanding)
- Obligation to comply is solely the responsibility of the “Operator” of the project
  - ODOT & Contractor are co-operators
Once upon a time in 2004...

- ODOT prepares all SWPPP & provides construction inspection
- $90,000,000 Project with $59,000 BMP budget
- Environmental Group complaint(s)
- NOD + NOV
- Threaten Law Suit to OEPA
- OEPA F&Os
  - Fines & mitigation
  - Plan to educate
  - Liaison with the Dept.
  - Project level response plans
  - Compliance shall be facilitated through the contract
As a result...Introduce SS832

- ODOT no longer prepared SWPPP
  - No ODOT Erosion & Sediment Control Manual
- Compliance became a contract element
  - SWPPP preparation, inspections, SWPPP updates
  - ODOT tracks quantities of BMP to compensate the contractor
- Contractor shares in compliance responsibility
- SS832 is not a compliance guideline, it simply provides a mechanism that describes how to compensate a contractor for E&S controls
SS 832 Fundamentals

- ODOT files initial NOI with OEPA and receives CGP Facility #
  - MOU allows variance of having SWPPP prepared prior to NOI filing
- Two bid items are added to construction plans
  - SS832 Erosion & Sediment Control Item (encumbered amount)
  - SS832 Stormwater Pollution Prevention Plan (competitive bid item)

Supplemental Specification 832 Cost Breakout

SWPPP Bid Item: Contractor competitive bid item
  - SWPPP Design
  - Inspections
  - SWPPP Revisions

Encumbered Amount ODOT Plan preparer – BMP Estimator tool
  - Estimated bank account that pays a pre-determined amount for each BMP unit
## Temporary Erosion Control Estimating

**English Units**

**Project Name**
- [ ]

**PID**
- [ ]

**Estimated Construction Cost**
- $76,000,000

**Project Type**
- Major Reconstruction

**Planned Construction Seasons**
- 1

**Total of Temporary Erosion Control**
- $0

**Percentage of Construction Cost**
- 0.000%

- Percentage less than 1% of construction - Recheck your inputs

### Sediment Basins

- **Project Earth Disturbed Area (acres)**
- [ ]

- **Est. Contractor Disturbed Area (acres)**
- [ ]

- **Total Acres**
- 0

### Contributing Drainage Area to Culverts

<table>
<thead>
<tr>
<th>Culvert</th>
<th>Drainage Area (acres)</th>
<th>Settling Basin Size (cyd.)</th>
<th>Temporary Sediment &amp; Erosion Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culvert 1</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>Culvert 2</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>Culvert 3</td>
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<td>Culvert 4</td>
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<td>Culvert 6</td>
<td>[ ]</td>
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<tr>
<td>Culvert 7</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Construction Seeding and Mulching

- **Seeding Area**
- [ ]

- **(Square. yd.)**
- [ ]

- **($/Square Yard)**
- $0.00

### Perimeter Filter Fabric Fence

- **Length of project (ft)**
- [ ]

- **($/Foot)**
- $0.00

- [ ]
### Temporary Sediment and Erosion Control Best Management Practices (BMP) Unit Price Schedule, October 2013

#### Erosion Control Prices

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Description</th>
<th>Price ($)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>832</td>
<td>Sq. Yd.</td>
<td>Construction Seeding and Mulching</td>
<td>1.00</td>
<td>Based on NOI acres</td>
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<tr>
<td>832</td>
<td>Feet</td>
<td>Slope Drains</td>
<td>12.00</td>
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<td>832</td>
<td>Cu. Yd.</td>
<td>Sediment Basins and Dams</td>
<td>13.50</td>
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<tr>
<td>832</td>
<td>Feet</td>
<td>Perimeter Filter Fabric Fence</td>
<td>4.05</td>
<td>Based on NOI acres</td>
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<tr>
<td>832</td>
<td>Feet</td>
<td>Filter Fabric Ditch Check</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>832</td>
<td>Cu. Yd.</td>
<td>Inlet Protection</td>
<td>11.25</td>
<td></td>
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<tr>
<td>832</td>
<td>Cu. Yd.</td>
<td>Dikes</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>832</td>
<td>Sq. Yd.</td>
<td>Construction Ditch Protection</td>
<td>2.50</td>
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<tr>
<td>832</td>
<td>Cu. Yd.</td>
<td>Rock Channel Protection, Type C or D with Filter</td>
<td>55.00</td>
<td>[1] Add the following amount per cubic yard for the cost of Type C or D Rock materials.</td>
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<tr>
<td>832</td>
<td>Cu. Yd.</td>
<td>Rock Channel Protection, Type C or D without Filter</td>
<td>50.00</td>
<td>[1]</td>
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<td>832</td>
<td>Cu. Yd.</td>
<td>Basin Sediment Removal</td>
<td>10.00</td>
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<td>832</td>
<td>Cu. Yd.</td>
<td>Miscellaneous Sediment Removal</td>
<td>15.50</td>
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<td>832</td>
<td>Feet</td>
<td>Construction Fence</td>
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<td>Construction Mulching</td>
<td>0.79</td>
<td>Based on NOI acres</td>
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<td>832</td>
<td>Sq. Yd.</td>
<td>Winter Seeding and Mulching</td>
<td>1.08</td>
<td>Based on NOI acres</td>
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<tr>
<td>832</td>
<td>Cu. Yd.</td>
<td>Construction Entrance</td>
<td>75.25</td>
<td></td>
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</table>

[1] Add the following amount per cubic yard for the cost of Type C or D Rock materials.

SS 832 Fundamentals

- Once awarded – Contractor submits co-operator request with CGP Facility #
- Contractor becomes co-operator
- Contractor develops a SWPPP appropriate for the work
  - Must be prepared by Professional Engineer & Certified Professional in Erosion & Sediment Control
SS 832 Fundamentals

- ODOT only reviews SWPPP for acceptance
  - Minimal review of plan elements
    - performed at project level – project engineer
Reviewing the Contractor’s SWPPP

- SS832.10 ODOT Acceptance of the SWPPP
- ODOT may critically assess...
  - Delineate the watersheds
  - Supporting Calculations (minimal)
    - Silt fence
    - Sediment pond geometry and drawdown
  - Trained Personnel
  - Staging / sequencing the work
  - BMP quantities for entire project
    - Is estimated amount within limits... does it appear adequate for entire project?
  - Does the SWPPP appear to be reasonably compliant?

02/03/2012
SS 832 Fundamentals

• If accepted, authorizes the start of work
• Contractor installs BMP per the SWPPP and is paid per item each installed
• Post-Construction BMP are not compensated under SS832 – have their own item numbers
Inspections & SWPPP Updates

- Contractor’s inspector provides weekly and after 0.5” rainfall event inspections
- CPESC/P.E. is required to review weekly reports and re-certify compliance monthly
- The SWPPP is “amended” as the work progresses
- Contractor is compensated for appropriate BMPs only
Projects that Do not require an SWPPP

• All projects should contain SS 832
• When a SWPPP is not required by the CGP, the Contractor does not get compensated for the SS832 lump sum
• The Contractor must still provide a written plan describing BMP to be used on the project

02/07/2012
When a Contractor does not comply...

- SS832.04 Provisions
- Provide notification to Contractor that they are not in compliance with CGP
  - This is formal notice that your construction activity is not compliant with the law...Site the provisions 832.05
  - The BMPs installed on the construction site are not consistent with the SWPPP. You are required to correct these inconsistencies or submit a revised SWPPP that is sealed by your CPESC/PE storm water designer.
When a Contractor does not comply...

• Correct and mitigate non-compliant conditions within 48 hours of notification
• Failure to correct the conditions may result in suspension of the work for the entire project until such corrections are performed
• Repeated non-compliance may result in removal of the project superintendent
SS 832 Benefits

- Reduced staff oversight
- Flexible
- Responsive
- Regulator’s maintain comfort level
- Promotes Contractor & Department partnering
SS 832 Lessons Learning...

• Difficult to manage with limited staff
  – E&S is a low cost, low priority item in the context of the overall project

• Set project level contract provisions

• Project submittals – set quality standards

• Training & education is essential

• Difficult to control the contract elements
  – Too little BMP
  – Too many BMP
  – Selection of BMP
Ohio EPA Audit

- No US EPA involvement
- Notified in 2012 - Construction site inspections conducted in December of 2013
- No report issued to date
- Still waiting internal process audit
- Possible findings...
  - More Dept. oversight to control quality
  - More detailed review of SWPPP
  - Internal quality control assessment
Questions

• Hans.Gucker@dot.state.oh.us
• 614-387-3058