

# CONSTRUCTION SITE INSPECTORS MUST BE INDEPENDENT

by

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## INTRODUCTION

The July 1, 2003 Environmental Protection Agency (EPA) requirements for development of a Storm Water Pollution Prevention Plan (SWPPP) identify three operators responsible for the National Pollutant Discharge Elimination System (NPDES) permit.

1. *Operators having operational control over plans and specifications.* These operators (e.g., property owners) have an obligation to oversee development of plans that ensures sediment and erosion control mitigation measures are identified in a manner that ensures NPDES requirements are met. Usually, qualified designers completing all aspects of the SWPPP (or other required plan) for submittal to regulatory agencies fulfill this obligation.
2. *Operators having operational control over day-to-day activities.* The second operator (e.g., excavation contractors) implements what the first operator has developed. These operators must fulfill their obligations in a manner that addresses an accepted SWPPP or other approved plan. Also, they must complete their work in a manner that meets NPDES requirements, including completing Best Management Practice (BMP) inspections and maintaining records.
3. *Operators controlling a portion of a larger project.* The third operator controls a portion of a larger project in which a SWPPP or other approved plan is implemented. Examples of such operators include builders, utility companies, and pipeline contractors. All work must be compliant with an approved NPDES permit within a SWPPP control area. Also, EPA specifically mandates that their activities cannot render another party's pollution control methods ineffective. As with second operators, inspection of BMPs and maintaining records is an obligation.

For this paper, we classify the above as Type 1, Type 2, and Type 3 operators, respectively.

## IDENTIFYING THE SITUATION

After reviewing 17 small and large construction sites in three North Carolina, Dr. Seth Reice (EPA, 2001) found that imposing stringency regulation criteria has less of an impact in controlling sediment pollution than a flexible problem-solving cooperative inspection and enforcement policy. He also recommends the following:

1. Provide sufficient inspectors to visit each construction site at least weekly.
2. Give inspectors the authority and knowledge to implement innovative solutions to (sediment and) erosion problems on a site-specific basis.
3. Empower the inspectors to issue severe penalties (stop-work orders) in the case of sedimentation violations.
4. Raise the maximum level of fines to a meaningful amount (\$10,000 per day is suggested).
5. Educate the development community to the damage that sedimentation does to stream communities.

Dr. Reice's findings meet the intent of the latest EPA (2003) ruling that operators have to inspect BMPs installed on their project. Also, it is important to note that there is no EPA requirement for municipalities, counties, or states to complete inspections. Thus, Type 2 and Type 3 operators should not rely upon a regulatory agency to complete their legal obligation.

According to the EPA (2003), the SWPPP is to identify whether inspections are to be conducted:

1. At least once every 7 calendar days, OR
2. At least once every 14 calendar days and within 24 hours of the end of a 0.5-inch or greater storm event.

There are also guidelines for reducing inspection frequency to once every month for temporarily stabilized sites, winter conditions, suspension of land disturbing activities, arid and semi-arid conditions and if a waiver period is documented in the SWPPP:

Inspections must include all areas of the site disturbed by construction activity and where storage of materials is exposed to precipitation. In addition, EPA states that inspections are to be conducted by qualified personnel who meet all three of the following criteria:

- Knowledgeable in the principles and practice of erosion and sediment control.
- Possess the skills to assess conditions at the construction site that could impact storm water quality.
- Can assess the effectiveness of installed sediment and erosion control measures to control the quality of storm water discharges from the construction activity.

Few contractors/builders have such highly trained individuals on their staff. As a result, sediment and erosion control on construction sites by second and third operators becomes a low priority and often not taken seriously. Thus, non-compliance issues on construction sites become significant (and costly) problems.

Unfortunately, when it comes to having qualified inspectors, most regulatory agencies also have similar problems as contractors. In addition, regulatory agencies usually do not have sufficient number of inspectors nor funds to complete site inspections in a timely and effective manner. Unscrupulous contractors/builders take advantage of this situation when completing their work knowing their chances are good that they will not receive any non-compliant citation.

**THE ROLE OF AN INDEPENDENT INSPECTOR**

What can be done when Type 2 and Type 3 operators do not have qualified inspectors? Also, how are regulatory agencies able to provide sufficient numbers of qualified inspectors to ensure enforcement of EPA regulations? The idealistic answers to these (and many other questions) lies with ensuring sufficient funds are available for training and paying personnel. Unfortunately, sufficient money does not exist for contractors/builders to provide adequate training that will ensure their inspectors have the EPA mandated skills. Regulatory agencies have the same problem since they are not provided with sufficient funds to hire adequate numbers of inspectors for their environmental departments.

Embracing the concept of contracting independent inspectors provides a solution to this problem. For this paper, an independent inspector is defined as a private professional consultant or company that:

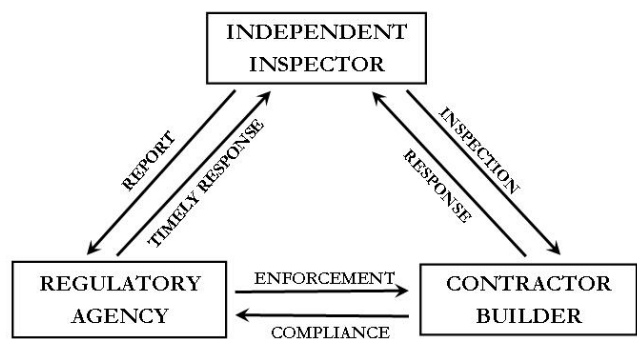
- Ensures the experience of those doing inspections have or exceed the three EPA requirements,
- Is not a regulatory agency employee, yet is accountable to one or more environmental agencies,
- Is not employed by Type 2 and/or Type 3 operators, but completes their inspections,
- Provides written documentation of all findings to both parties.

Independent inspectors have to be accountable to one or more regulatory agencies as well as to the Type 2 and/or Type 3 operators. This means their contracts have to be developed and written in a manner that ensures political (or physical) intimidation by either party cannot occur. Also, a funding mechanism for their services must exist in a manner that ensures regulatory agencies and operators pay their fair share of the costs.

Having an independent inspector program does not eliminate the need for involvement by the regulatory agency. When the contractor/builder does not complete tasks to ensure compliance with an approved SWPPP exists, the regulatory agency must take over to administer penalties (see the diagram).

An independent inspector must be able to complete the following tasks in a professional manner:

- Meet weekly or biweekly with contractors/builders to assess the applicability of a SWPPP or other approved plan.
- Complete timely inspections as required by an accepted SWPPP or other approved plan.
- Meet at least monthly with regulatory agencies concerning inspections completed.
- Provide recommendations to the contractor/builder and regulatory agencies concerning applicability of BMPs and non-compliance issues.
- Develop defensible documentation for each inspection.



Finally, it is imperative that an independent inspector be, or work under the guidance of, a Certified Professional in Erosion and Sediment Control (CPESC).

**ADVANTAGES AND DISADVANTAGES**

There are numerous advantages of having an independent inspector complete inspections on Type 1 and Type 2 operator construction sites. For example,

- A professional resource knowledgeable about sediment and erosion control will be available to the regulatory agencies and operators.
- Regulatory agencies will realize a reduction in their costs since fewer inspectors will be needed.
- Operators will realize a savings in overall expenses by having to implement and maintain sediment and erosion control measures in a timely manner.
- Inspections will be completed in an unbiased manner with full accountability to all parties.
- Professional and uniform documentation will exist for all inspections.
- Inspections will be completed at regular intervals resulting in protection of the environment.

Disadvantages for such a program are few. However, some of the more obvious ones include:

- Independent inspectors will not represent the interests of regulatory agencies nor operators. (True, since the main goal of an independent inspector is to protect the environment).
- Operators will have to pay for inspections. (False, since operators should already be paying for an inspector that is a member of their staff).
- Independent inspectors may not have the political backing of the regulatory agencies. (If true, the program should not be implemented).
- There will be extensive amounts of paperwork to maintain an effective program. (True, but such work should already exist).

### **SUGGESTED GUIDELINES FOR IMPLEMENTING AN INDEPENDENT INSPECTOR PROGRAM**

**Program Development:** Since the responsibility of an independent inspector program is to ensure EPA criteria are implemented, it will be necessary that it be “quasi administered” by the regulatory agencies. Yet operators need to recognize that such a program exist will provide a cost effective, and unbiased, service for them. The following provides suggestions on how to develop such a program:

- Hold a series of educational and working meetings with the regulatory agencies and Type 2 and Type 3 operators to explore how to set up such a program that will benefit both parties in a cost effective manner while protecting the environment.
- Develop a program that is initiated by the regulatory agency, but not totally subjugated by their rules and policy. Such a program will need to clearly identify how accountability will occur between the regulatory agency and independent inspector.
- Develop a meaningful and enforceable policy for penalties that can be severe (e.g., stop work orders) and meaningful (e.g., daily fines of at least \$10,000).
- Educate the development community, politicians, and public as to why an independent inspector program will provide benefits and be cost effective.

**Selection Process:** A process must exist that ensures regulatory agencies and operators have the most qualified and professional independent inspectors available to complete site visits and represent their findings in an unbiased manner. Therefore, the following selection guidelines are suggested:

1. Develop a professional process that excludes “low bid” prices.
2. Determine reasonable unit fees for inspection and administrative tasks.
3. Use professional qualification and experience as the primary selection criteria.
4. Select at least three different individuals and/or companies.

**Contract Process:** Two types of contracts are to be formulated. The first is a document between the regulatory agency and independent inspector. The second is between the independent inspector, regulatory agency, and operator.

#### Independent Inspector and Regulatory Agency

1. Develop a multi- (e.g., four) year contract with possible extensions.
2. Identify.
  - a. The tasks and responsibilities for each party.
  - b. The procedure for enforcement of non-compliant issues.
  - c. How accountability will be administered.
  - d. How termination can occur.
  - e. An agreed upon method for billing and payment of fees.
3. Require monthly and annual reports.

## Independent Inspector, Regulatory Agency and Operator

1. Assignment of the independent inspector by the regulatory agency.
2. Contract signing by all parties at a preconstruction meeting.
  - a. Identify the Type 2 and/or Type 3 operator's project site representative.
  - b. Identify regulatory agency's representative.
3. Identify inspection procedures.
  - a. Schedule (weekly or biweekly).
  - b. How to address and resolve non-compliant issues including working with the SWPPP designer.
  - c. Enforcement policy of the regulatory agency.
  - d. Report keeping.
4. Ensure independence from regulatory agency and operator.
5. Identify the regulatory agency chain of command.
  - a. Who oversees the inspections and reports?
  - b. Who is accountable for enforcement?
6. What happens when non-compliant issues are not addressed in a timely manner?
  - a. Action by the inspector.
  - b. Action by the regulatory agency.
7. What happens when non-payment of monthly fees occur.
  - a. Action by the inspector.
  - b. Regulatory agency obligation.
  - c. Operator obligation.
8. Grievance procedure.
9. Termination procedure.

***Identify Tasks to Complete:*** It is important the all parties understand what tasks are going to be completed by the independent inspector. Using the EPA as a guide, the following inspection tasks are a suggested minimum to complete:

1. Weekly, evaluate all disturbance and storage of material areas that are exposed to precipitation.
2. Look for evidence, or the potential for, pollutants entering the storm water conveyance system.
3. Assess whether sediment and erosion control measures identified in the SWPPP are operating properly.
4. Evaluate discharge locations to determine if BMPs are effective in preventing significant impacts to waters of the United States.
5. Check locations where vehicles enter and exit a site for evidence of off-site sediment tracking.
6. Complete a report. If non-compliance issues are not noted, then certify that the project is in compliance with SWPPP or other accepted plan and permit.
7. Sign the report.
8. Recording of precipitation values (if inspections are in response to rainfall events).

## **SUMMARY**

Inspections of sediment and erosion control practices on construction sites have to be done in a cost effective and practical manner. Yet, funding for sufficient numbers of inspectors is not available through regulatory agencies and is not a high priority by Type 2 and Type 3 operators. One solution to this problem is to implement an independent inspector program that is quasi-administered by regulatory agencies and paid for by both regulatory agencies and operators. Setting up such a program will require thinking and action that is outside of traditional methods for implementation.

## **REFERENCES**

- EPA. 2003. Final National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities, Notice. Federal Register, Volume 68, Number 126.
- Reice, Seith R. 2000. Regulating Erosion and Sediment Pollution in Streams: What Really Works and Why? Included in Proceedings: National Conference on Tools for Urban Water Resource Management & Protection (EPA/625/R-00/001).