

**Supplemental Guidance to the 1995 Interim Clean Water Act
Settlement Penalty Policy for Violations of the
Industrial Stormwater Requirements
September 8, 2016**

This guidance describes the Office of Civil Enforcement's (OCE's) recommended approach to exercising its enforcement discretion in the calculation of appropriate settlement penalties for violations of the Clean Water Act (CWA) stormwater regulations for industrial facilities. This guidance can be applied to all industrial categories required to obtain a National Pollutant Discharge Elimination System (NPDES) stormwater permit under the industrial stormwater regulations, with the exception of construction activities.

This guidance applies only to violations of the CWA stormwater requirements including violations of state or EPA-issued NPDES stormwater permits and unauthorized discharges of stormwater associated with industrial activity. This guidance does not apply to unauthorized discharges of wastewater or process water. Just as penalties for violations of CWA pretreatment requirements or Spill Prevention, Containment and Countermeasure (SPCC) requirements are calculated respectively using the March 1995 *Clean Water Act Interim Settlement Penalty Policy* (1995 CWA Settlement Penalty Policy) or the *Civil Penalty Policy for Section 311(b)(3) and Section 311(j) of the Clean Water Act*, penalties for unauthorized discharges of wastewater or process water should be calculated using the 1995 CWA Settlement Penalty Policy.

This document provides detailed guidance to Agency staff in calculating a minimum settlement penalty for violations of CWA stormwater requirements related to industrial facilities, including violations of NPDES industrial stormwater permits. This guidance is intended to explain a preferred method for calculating settlement penalties in industrial stormwater cases. Implementation of the approach recommended in this guidance will promote national consistency. Calculation of bottom-line settlement penalties for violations of the CWA construction stormwater requirements is addressed in a separate guidance document.

This document is guidance and was developed to assist EPA enforcement staff in their exercise of enforcement discretion in response to violations of NPDES industrial stormwater permits. EPA's decision whether to employ the approach described here when calculating a penalty for a particular case is within the Agency's sole discretion. In addition, while this guidance provides evaluative tools for assessing an appropriate settlement penalty, it expresses broad principles and does not take into account the myriad of potential circumstances that an individual violation may present. EPA fully expects that individual site conditions may result in variations from the approach described here. This guidance has been developed for internal EPA use and is not intended to create rights or obligations, or to limit the discretion of Agency staff. Moreover, it is not a rule nor is it intended for use by EPA, defendants, respondents, courts, or administrative law judges at a hearing or trial.

PENALTY CALCULATION METHODOLOGY

The 1995 CWA Settlement Penalty Policy uses the following formula to calculate a bottom-line settlement penalty:

Bottom-Line Penalty = (Economic Benefit) + (Gravity) +/- (Gravity Adjustment Factors) - (Litigation Considerations) - (Ability to Pay) - (Supplemental Environmental Projects)

The 1995 CWA Settlement Penalty Policy discusses each component of the above formula. This industrial stormwater penalty guidance is consistent with the above formula but addresses economic benefit, gravity, gravity adjustment factors, and litigation considerations specifically for industrial stormwater cases. OCE recommends that Agency staff continue to refer to the 1995 CWA Settlement Penalty Policy for guidance on the basic principles of all the penalty components (www.epa.gov/compliance/resources/policies/civil/cwa/cwapol.pdf), and to EPA's Supplemental Environmental Projects or SEP guidance. Attachments 1 and 2 contain sample worksheets that may be used to calculate the bottom-line settlement penalty for industrial stormwater cases.

A. ECONOMIC BENEFIT

Estimating the economic benefit of noncompliance in industrial stormwater cases will generally involve a similar process to that in other CWA penalty cases. Economic benefit results from a number of potential avoided or delayed costs associated with the failure to undertake each of several categories of industrial activity requirements. These include:

1. Failure to obtain NPDES permit coverage (BEN_{Permit});
2. Failure to develop a Stormwater Pollution Prevention Plan (SWPPP) or develop an adequate or complete SWPPP (BEN_{SWPPP});
3. Failure to implement stormwater controls or Best Management Practices (BMPs)¹ (BEN_{BMPs});
4. Failure to maintain stormwater controls or BMPs ($BEN_{\text{Maintenance}}$);
5. Failure to regularly inspect stormwater controls or BMPs (BEN_{Inspect}); and,
6. Failure to monitor or report² ($BEN_{\text{Monitor/Report}}$).

Thus, depending upon the available facts associated with a given set of violations, the total estimated economic benefit of non-compliance could be expressed as:

¹ This category includes employee training.

² This could include

- monitoring required but not conducted or documented (e.g., visual, compliance (effluent limits), or benchmark monitoring)
- annual comprehensive site inspection and annual report not conducted
- DMRs not submitted
- failure to certify documents
- failure to report non-stormwater discharges
- failure to conduct follow up after an exceedance of a benchmark

$$\text{BEN}_{\text{Total}} = \text{BEN}_{\text{Permit}} + \text{BEN}_{\text{SWPPP}} + \text{BEN}_{\text{BMPs}} + \text{BEN}_{\text{O\&M}} + \text{BEN}_{\text{Inspect}} + \text{BEN}_{\text{Monitor/Report}}$$

In order to derive a total BEN, Agency staff should take into account the avoided and delayed costs associated with each of the six activities identified above.³ To use the BEN model, Agency staff should determine whether the costs associated with each of these six activities are avoided or delayed, and whether they are capital expenditures, one-time nondepreciable costs, or annually recurring costs.

Calculating the total economic benefit using the BEN model may require conducting several separate runs of the BEN model. However, BEN runs can be combined for the various avoided and delayed costs where (1) the dates for noncompliance, compliance and penalty payment are the same; (2) the combined expenses in any of the three cost categories (capital, one-time nondepreciable, and annually recurring costs) have the same cost estimate date; (3) costs lumped into the same cost category (capital, one-time nondepreciable or annually recurring costs) are all either delayed or avoided; and (4) all stormwater controls associated with the capital costs have the same useful life. The avoided and delayed costs associated with each of these industrial activities are discussed in detail below, along with guidance on how to apply the BEN model to each type of violation. Where case-specific cost information (e.g., obtained via CWA §§ 308 or 309(a) authorities) is available, it should be used as inputs for the BEN model. However, in instances where case-specific cost information is not available, the case developer should use best professional judgment to determine reasonable estimates of those costs.⁴

1. **BEN_{Permit}**

- a. In most cases, the cost of obtaining a permit will be a delayed one-time nondepreciable cost since most facilities that are the subject of an industrial stormwater enforcement action will be operating facilities and will eventually apply⁵ for a permit. The cost of obtaining a permit would be an avoided one-time nondepreciable cost only if the operator closed or sold the facility before obtaining permit coverage.⁶ In those rare cases where the costs are avoided, uncheck the “Delayed, Not Avoided” box for “One-Time Nondepreciable Costs” on the BEN model’s options screen to indicate avoided costs.⁷ The date of permit coverage should be used in the BEN Model as the final compliance date for

³ All six factors may not be relevant in all cases.

⁴ If estimated costs are used and, during negotiations, actual cost information becomes available, BEN can be revised accordingly.

⁵ Many industrial stormwater discharges are covered under general permits, and notices of intent (NOIs) to be covered under such general permits are not considered permit applications. However, for ease of reference, this guidance will use the terms “apply” or “application” to refer both to individual permit applications and NOIs to be covered under general permits.

⁶ For the purpose of all economic benefit discussions, closing a facility assumes that the facility is no longer operating and all sources of pollutants that could potentially be exposed to stormwater have been removed such that a permit is no longer required.

⁷ These directions apply to the current version of the BEN model (version 5.6.0). Directions for identifying costs as either avoided or delayed may change in future versions of the BEN model.

delayed costs. The date when the operator transferred ownership or closed the facility should be input as the final compliance date for avoided costs.

- b. Permit application costs can include a state permit fee (which varies by state), the cost of preparing the application, and, in some cases, engineering fees. EPA's Multisector General Permit does not require a permit fee.

2. BEN_{SWPPP}

- a. The cost of developing or revising a SWPPP should generally be input into the BEN model as a delayed one-time nondepreciable cost. The cost would be an avoided one-time nondepreciable cost in those rare cases where the SWPPP development and/or revision requirements no longer apply, for example, when the operator closes or transfers ownership of the facility. For delayed costs, the date when the operator completes a SWPPP, or makes the necessary SWPPP revisions, should be used in the BEN model as the final compliance date. The date the operator transferred ownership or closed the facility should be used as the final compliance date for avoided costs.
- b. The cost of developing or revising a SWPPP will vary depending upon the size, complexity, and nature of industrial activities. Actual cost data should be used where it is available. In the absence of actual cost data, use best professional judgment.

3. BEN_{BMP}

- a. The avoided or delayed costs of installing or implementing control measures may be either capital investment costs,⁸ one time nondepreciable costs, or annually recurring costs. The costs of control measures that are structural or involve installation of equipment, such as oil-water separators, should generally be entered into the BEN model as capital investment costs. Control measure expenditures that need to be made only once and do not involve the purchase of any equipment should generally be entered into the BEN model as one-time nondepreciable costs. The cost of avoided nonstructural control measures that should have been implemented on a regular basis, such as general good housekeeping and employee training, are typically input into the BEN model as annually recurring costs. When inputting the capital costs of structural controls or equipment, be sure that the useful life used in the BEN run is appropriate for each specific control measure. If the useful life of a structural control measure is less than three years (the shortest useful life that can be applied when using the BEN model), or the cost of the control is not a depreciable cost, then it may be more appropriate to consider those costs as either one-time nondepreciable costs or annually recurring costs.

⁸The BEN manual states that capital investment costs should include all depreciable investment outlays necessary to achieve compliance.

In general, the capital and one-time nondepreciable costs will be delayed costs. However, if the control measures were not implemented or installed before a facility either closes or is sold, then the costs would be avoided costs. The BEN model automatically treats annually recurring costs as avoided costs. When inputting annually recurring costs into the BEN model, the case developer should calculate and input the total annual cost. The total annualized cost is the cost that would have been incurred over a calendar year.⁹

- b. The date that the control measures were, or will be, installed and made operational or are otherwise implemented should be entered into the BEN model as the final compliance date for delayed costs. If the facility closed or was sold prior to implementing the control measures, then the date the facility closed or transferred ownership is the final compliance date for these avoided costs.
- c. Actual site-specific and control measure-specific cost information is particularly useful because the nature, extent, and cost of control measures (e.g. structural and non-structural) can vary significantly, especially across different industries and different geographic areas. Some information can be obtained from invoices, copies of contracts for supplies and services, and typical industry standards.

4. BEN_{O&M}

- a. Depending on the case-specific circumstances, staff should generally input the avoided costs of operating and/or maintaining control measures into the BEN model as either annually recurring costs or one-time nondepreciable costs. For example, where control measures were not installed in a timely manner, the operator may have avoided costs for operating and maintaining those controls. In such cases, staff should generally input the avoided operation and maintenance costs into the BEN model as annually recurring costs. Similarly, where control measures are in place but the permittee fails to properly operate or maintain them over an extended period of time (e.g., several months), it would also generally be appropriate to consider these avoided costs to be annually recurring costs. (The BEN model automatically treats annually recurring costs as avoided costs.)

On the other hand, where a permittee fails to properly operate or maintain a control measure for a short period of time, or only periodically, it may be more appropriate to treat the avoided costs as one-time nondepreciable costs. For avoided one-time nondepreciable costs, uncheck the “Delayed, not Avoided” box on the Options screen when inputting the costs into the BEN model.¹⁰ For

⁹ For example, if the total avoided cost over six months is \$5,000, the cost input into the BEN model would be \$10,000. The BEN model will then adjust the economic benefit to account for the actual length of the violation using the noncompliance and compliance dates input into the model.

¹⁰These directions apply to the current version of the BEN model (version 5.6.0). Directions for identifying costs as either avoided or delayed may change in future versions of the BEN model.

additional guidance on categorizing costs as one-time nondepreciable or annually recurring, refer to the BEN manual.

- b. The date when the operator repairs or otherwise starts to properly operate and maintain the control measures should be used in the BEN model as the final compliance date. The number of months of violation may be estimated by reviewing monitoring records, inspection reports or other information provided by the facility to determine when the deterioration was first noted and how long it continued without repair. If such information is not available, or records are incomplete or inadequate, estimate the length of time based on best professional judgment.
- c. Actual site-specific costs for operating and maintaining a particular BMP should be used where those figures are available through invoices, etc. Where such cost information is not available, the case developer may use estimates from industry sources within the area or use general cost estimates. If actual costs are obtained during negotiations, these figures can be substituted, as appropriate.

5. BEN_{INSPECT}

- a. Where there is no evidence that required inspections have been performed in accordance with permit requirements, staff should input the avoided cost of doing stormwater inspections into the BEN model as an annually recurring cost. (Note that staff should calculate the total annual cost of conducting inspections and input that amount into the BEN model, along with the initial noncompliance and final compliance dates.¹¹) The date of noncompliance will generally be the date the first missed or avoided inspection was due. The compliance date will generally be the date an inspection was finally conducted, or will be conducted.
- b. For cases where some, but not all, of the required inspections were conducted, Agency staff could input the avoided costs for the missed inspections into the BEN model as one-time nondepreciable costs. Where there is more than one missed inspection, and staff conducts one BEN run, the noncompliance date, for purposes of the BEN model, should be the midpoint of the noncompliance period. Or, alternatively, separate BEN runs could be done for each missed inspection or group of missed inspections. When using the BEN model, uncheck the “Delayed, Not Avoided” box on the options screen to indicate avoided one-time nondepreciable costs.¹²

¹¹For example, if the total avoided cost over six months is \$5,000, the cost input into the BEN model would be \$10,000. The BEN model will then adjust the economic benefit to account for the actual length of the violation using the noncompliance and compliance dates input into the model.

¹²These directions apply to the current version of the BEN model (version 5.6.0). Directions for identifying costs as either avoided or delayed may change in future versions of the BEN model.

6. BENMONITOR&REPORT

- a. Agency staff can input the avoided monitoring costs into the BEN model as either annually recurring costs or as avoided one-time nondepreciable costs. It may be more appropriate to categorize the avoided monitoring costs as one or the other depending on the case-specific circumstances. For example, where the permit contains routine monitoring requirements (e.g., more frequent than annual) and the permittee routinely fails to monitor stormwater discharges in accordance with its permit, the avoided monitoring costs should generally be input into the BEN model as annually recurring costs. (Note that staff should calculate the total annual cost of monitoring and input that amount into the BEN model, along with the initial noncompliance and final compliance dates.¹³) On the other hand, where the permit requires only periodic or annual monitoring, or where the permittee failed to monitor on only one occasion, it may be more appropriate to treat the avoided monitoring costs as avoided one-time nondepreciable costs.
- b. Where the costs are treated as avoided one-time nondepreciable costs, the compliance and noncompliance dates will be permit-specific. In general, where monitoring is required within specified timeframes, such as quarterly or annually, the noncompliance date will be the last day of the monitoring period (i.e., the date by which the monitoring should have been conducted). The compliance date will be the day following the missed monitoring period. The rationale is that once the specified monitoring period is over, the clock starts again and any subsequent monitoring would only count for the monitoring period in which the sampling was conducted. When using the BEN model, uncheck the “Delayed, Not Avoided” box on the options screen to indicate avoided one-time nondepreciable costs.¹⁴
- c. Where the costs are treated as annually recurring costs, the dates of non-compliance and compliance will cover the entire sampling period(s) that was missed. For example, if quarterly sampling was required but was not conducted during the first two quarters, the noncompliance date would be the beginning of the first missed quarter and the compliance date would be the beginning of the third quarter.
- d. For cases where the annual review (i.e., the comprehensive site evaluation and annual report) is not completed, the cost of conducting the evaluation would typically be considered an avoided one-time nondepreciable cost. When using the BEN model, uncheck the “Delayed, Not Avoided” box on the options screen to indicate avoided one-time nondepreciable costs.¹⁵ If an annual review is conducted late, the costs would be considered delayed costs. The date of

¹³The BEN model will then adjust the economic benefit for the actual length of the violation based on the dates of noncompliance and compliance.

¹⁴These directions apply to the current version of the BEN model (version 5.6.0). Directions for identifying costs as either avoided or delayed may change in future versions of the BEN model.

¹⁵These directions apply to the current version of the BEN model (version 5.6.0). Directions for identifying costs as either avoided or delayed may change in future versions of the BEN model.

noncompliance would generally be the date the annual review was due; the compliance date would be the date an annual review was actually conducted, or will be conducted.

B. GRAVITY COMPONENT

In general, the following formula should be used for calculating the gravity component in industrial stormwater cases:

$$\text{Gravity Component} = [(\text{Sum of A for each month of violation}) \times \$1000] + B + [D \times \$1000]$$

Gravity components A, B and D in the above equation are defined in the 1995 CWA Settlement Penalty Policy and are discussed more fully in this guidance in the context of the industrial stormwater requirements. The above equation is a modification of the gravity formula in the 1995 CWA Settlement Penalty Policy.¹⁶ This guidance also modifies the methodologies for determining the B and D factors for industrial stormwater cases. Instead of calculating these factors on a month by month basis, Agency staff will select a specific dollar amount for the B Factor that reflects the actual or potential harm to human health or the environment throughout all months that the defendant was in violation. For the D Factor, Agency staff will select a value that reflects the seriousness of the violations throughout the period of noncompliance, and then adjust that value to account for duration of noncompliance and the size and sophistication of the defendant.

1. "A" FACTOR – SIGNIFICANCE OF EFFLUENT VIOLATIONS

The A Factor applies in cases where the facility's industrial stormwater permit includes numeric effluent limitations. Use the *Gravity Factor A – Significance of Violation* table from the 1995 CWA Settlement Penalty Policy, which is included below, to determine an appropriate A Factor **for each applicable month of violation**.

For purposes of calculating the penalty in industrial stormwater cases, numeric effluent limits should generally be treated as daily maximums unless specifically identified otherwise by the permit. For example, 30-day average limits are specified for some industrial sectors. Whether a daily maximum or 30-day average, the A Factor value will apply to the month the samples were collected. The A factor does not apply to numeric benchmark values. Exceedances of benchmark values are addressed by the D Factor. Where there are no numeric effluent limits included in the permit, the A Factor will be zero for all months.

The A Factor table and corresponding guidance from the 1995 CWA Settlement Penalty Policy are included in italics below.

¹⁶ The gravity formula in the 1995 CWA Penalty Policy is: Monthly Gravity Component = (1 + A + B + C + D) X \$1000. For the purpose of this Industrial Stormwater Penalty Guidance, the monthly constant of "1" and the C Factor (Number of Effluent Limit Violations) have been dropped from the equation.

"A" -- Significance of Violation (Monthly Range 0 to 20). This factor is based on the degree of exceedance of the most significant effluent limit violation in each month. Values for this factor are selected from within designated ranges; violations of toxic monthly effluent limits are weighted most heavily. Values are selected using the table below based on the effluent value which yields the highest factor A value. Regions select a particular value for factor A within the designated range. For purposes of this table, conventional and nonconventional pollutants include biochemical oxygen demand, chemical oxygen demand, total oxygen demand, dissolved oxygen, total organic carbon, total suspended solids, total dissolved solids, inorganic phosphorous compounds, inorganic nitrogen compounds, oil and grease, calcium, chloride, fluoride, magnesium, sodium, potassium, sulfur, sulfate, total alkalinity, total hardness, aluminum, cobalt, iron, vanadium and temperature. Factor A values for fecal coliform and pH, which are calculated using logarithmic scales, are calculated using the special scales at the bottom of the table. All other pollutants are classified as toxic pollutants.

If there were no effluent limit violations in a particular month, but there were other violations, then factor A is assigned a value of zero in that month's gravity calculation.

GRAVITY FACTOR A -- SIGNIFICANCE OF THE VIOLATION				
<i>Select a value for factor A based on the effluent limit violated in the month which produces the highest range of values for factor A.</i>				
Percent by which effluent limit was exceeded:			Factor A Value Ranges	
Monthly Average	7-day Average	Daily Maximum	Toxic Pollutants	Conventional & Nonconventional Pollutants
1 - 20	1 - 30	1 - 50	1 - 3	0 - 2
21 - 40	31 - 60	51 - 100	1 - 4	1 - 3
41 - 100	61 - 150	101 - 200	3 - 7	2 - 5
101 - 300	151 - 450	201 - 600	5 - 15	3 - 6
301 - >	451 - >	601 - >	10 - 20	5 - 15
Percent Exceedance of Fecal Coliform Limit:		Standard Units above or below pH limit:	Factor A Value Ranges:	
0 - 100		0 - 0.50	0 - 5	
101 - 500		0.51 - 2.0	2 - 8	
501 - 5,000		2.01 - 3.0	4 - 10	
5,001 - >		3.01 - 4.0	6 - 12	
		4.01 - >	8 - 15	

2. "B" FACTOR - HEALTH AND ENVIRONMENTAL HARM

The B Factor is a dollar amount that is intended to reflect the actual or potential harm to human health or the environment over the entire duration of noncompliance. An appropriate B Factor may be determined using one of the three tables below. These tables

provide a range of B Factor values that can be applied to a particular case based on the quality of the receiving waters, the type of harm (actual or potential), and the duration of the violations.

The procedures in Steps 1 through 5 below describe how to use the B Factor tables to select an appropriate B Factor value.

STEP 1: Select the appropriate table based on whether the noncompliant facility discharges to a high, medium or low quality water.

The criteria below may be used to classify the receiving waters. Note that in addition to the receiving waters at the immediate point of discharge from the industrial site, pertinent receiving waters may also include waters farther downstream. Agency staff should use best professional judgment to determine which receiving waters should be considered based on the industrial site's potential to impact, or contribute to impacts on, the downstream receiving waters. Agency staff should consider, for example, the distance from the discharge point to downstream waters, stream flow (velocity and quantity), and the sensitivity of the downstream waters (e.g., it is habitat for an endangered species, it is listed on the 303(d) list for the subject pollutant, it is the subject of a TMDL, or a portion of the runoff flows into an MS4, etc.) If assessing the B Factor for both the immediate and downstream receiving waters, the highest water body classification should be selected.

High Quality Waters: For the purpose of this guidance, a receiving water can be characterized as a high quality water where the designated or actual uses include at least one of the following:

- It is designated or used as a source of public water supply;
- It is used for shellfish harvesting without depuration;
- It provides high quality habitat for fish, other aquatic life and wildlife;
- It provides habitat for endangered or other sensitive species;
- It is used for primary and secondary contact recreation; and/or,
- It is designated or classified as (1) an Outstanding Natural Resource Water, (2) a Wild and Scenic River, or (3) is otherwise a sensitive water, providing, for example, a critical ecological use such as excellent cold water fish habitat or anadromous fish passage.

In addition, where a receiving water does not meet the criteria above for a high quality water, but is a 303(d) listed water or subject to a TMDL for the pollutant of concern, then the receiving water should be treated as a high quality water for the purposes of determining the B Factor.

Medium Quality Waters: The receiving water can be characterized as a medium quality water where the designated or actual uses include at least one of the following:

- It is suitable as a source of public water supply with appropriate treatment;

- It is suitable for shellfish harvesting with depuration;
- It provides less than high-quality habitat for fish, other aquatic life and wildlife;
- It is suitable only for secondary contact recreation; and/or,
- It is suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses.

Low Quality Waters: The receiving water can be characterized as a low water quality water in those cases where it does not meet the criteria for either high or medium water quality. A potential example of a low quality receiving water could be a heavily industrialized shipping channel.

STEP 2: Determine whether the duration of noncompliance is short term (less than seven months), medium term (seven through 24 months) or long term (over 24 months).

Staff should calculate the total number of months in which (i) one or more violations occurred, and (ii) there was at least one precipitation event resulting in a discharge. For the purpose of determining the B Factor duration, it is generally appropriate to consider both the months in which EPA observed a discharge and the months in which other information, such as rainfall and site topography, suggests that stormwater discharges occurred. This guidance assumes that rain events exceeding a certain size and intensity will generate stormwater runoff that has the potential to impact human health or the environment. In many cases, 0.5 inches during a 24-hour period is enough to produce discharge. This rate is intended to be a conservative standard, however, and the Regions may adjust this rainfall rate up or down based on site-specific information such as local soil conditions, topography, amount of impervious surface, and the presence and capacity of retention basins. In addition, other types of precipitation events such as snow melt may result in stormwater discharges. These discharges should be considered as well.

STEP 3: Determine whether actual impacts to human health or the environment have been identified, or whether impacts could potentially occur.

The types of violations that could potentially cause harm include the failure to implement or maintain adequate stormwater controls, the failure to conduct regular thorough inspections of the facility and the stormwater controls, the failure to monitor or sample as required by the permit, and the failure to consider any other information regarding the quality of stormwater discharges. Where the violations associated with a case have the potential to impact human health or the environment and no actual impacts have been identified, the “Potential Impacts” row of the table will apply. Where the types of violations do not have the potential to impact human health or the environment (e.g., failure to certify the SWPPP), then the B Factor would be zero.

Where EPA has evidence of one or more actual impacts, the “Actual Impacts” row of the table will apply. This row applies regardless of the duration of any actual impacts or whether the actual impact was a one-time event (such as a one-time fish kill) or a

recurring event (such as exceedance of water quality standards with every significant rain event). For example, EPA may have evidence related to only one rain event that resulted in documented impacts to the receiving water. Although impacts associated with all other significant rain events would be considered potential impacts, the “Actual Impacts” row of the tables should be used in this situation.

STEP 4: Determine the appropriate range of values based on Steps 1, 2 and 3 above.

STEP 5: Select a specific dollar amount from the appropriate range taking into consideration the magnitude or seriousness of any actual and potential impacts.

In each case, factors to consider in evaluating the magnitude of any potential impacts could include the types and severity of violations, the number and magnitude of any benchmark exceedances, the specific industry and its associated pollutants, total months of violation (i.e., whether at the high or low end of the applicable duration category), rainfall (total amount and intensity), topography, site conditions, and any other relevant information. Where actual impacts have been identified, this would include the type, magnitude and duration of the impacts on aquatic resources and beneficial uses, and whether the actual impacts were the result of a one-time event, or multiple or recurring events. The size and sophistication of the owner and operator of the industrial activity should not be a consideration for the B Factor, although the size of the facility may be a consideration. The paragraphs below provide additional guidance for selecting an appropriate dollar value.

Classification of Industrial Sectors: The type of industry and the potential pollutants associated with that industry are factors to consider when selecting an appropriate dollar value from the range. The tables below categorize the regulated industries into high, medium and lower priority based on the types of pollutants that could potentially be discharged from a particular industrial sector and the potential for these pollutants to adversely impact human health and the environment. The prioritization level of a particular industry is only one factor that should be considered along with all other relevant case-specific information. However, with all other factors being equal, a higher dollar value would generally be appropriate for those industries that are classified as high priority industries.

High Priority Industries or Sectors -- High priority industrial sectors are listed in the table below and include heavy industries and industrial sectors that have Effluent Guidelines and New Source Pollutant Standards.

HIGH PRIORITY INDUSTRIES OR SECTORS
Sector A - Timber Products (except SIC 2434)
Sector B - Paper and Allied Products Mfg. (except SIC 265, 267)
Sector C - Chemical and Allied Products Mfg. (except SIC 283)
Sector D - Asphalt Paving and Roofing Materials and Lubricants
Sector E - Glass Clay, Cement, Concrete, and Gypsum Products (except SIC 3231)
Sector F - Primary Metals
Sector G - Metal Mining (Ore Mining and Dressing)
Sector H - Coal Mines and Coal Mining-Related Facilities
Sector I - Oil and Gas Extraction and Refining
Sector J - Mineral Mining and Dressing
Sector K - Hazardous Waste Treatment, Storage or Disposal Facilities
Sector M - Automobile Salvage Yards
Sector N - Scrap Recycling Facilities
Sector O - Steam Electric Generating Facilities (only coal and oil-fueled plants)
Sector Q - Water Transportation (based on pollutants of concern and propinquity of industrial activities to receiving waters)
Sector R - Ship and Boat Building or Repairing Yards
Sector S - Air Transportation Facilities (based on deicing activities)
Sector T - Treatment Works (if sludge is source of violation)
Sector Z - Leather Tanning and Finishing
Sector AA - Fabricated Metal Products (only SIC 3441 Fabricated Structural Metal)

Other Criteria for High Priority Facilities: In addition, individual facilities that do not fall under one of the industrial sectors in the table above but meet the following criteria may also be considered high priority:

- Facilities with coal pile runoff (60 FR 51118);
- Any facility that was required to obtain an individual NPDES stormwater permit due to water quality concerns; or,
- Any facility that caused a severe environmental impact, such as a fish kill, grease or oil slick, beach closure, or major TMDL violation.

Medium Priority Industries -- The medium priority industrial sectors listed in the table below are generally less environmentally threatening than the high priority sectors.

However, as noted above, an individual facility falling under one of the medium priority industries or sectors, but meeting the high priority criteria, should be considered high priority (for example, where stormwater discharges from the facility caused a severe environmental impact).

MEDIUM PRIORITY INDUSTRIES OR SECTORS
Sector L - Landfills and Land Application Sites (based on the major pollutant of concern being TSS, but excessive TSS or presence of other pollutants in quantity may make this a high priority)
Sector P - Land Transportation
Sector T - Treatment Works (if sludge is not source of violation)

Lower Priority Industries -- The lower priority industrial sectors listed below are generally the least environmentally threatening. Again, however, an individual facility that would typically be considered a lower priority industry or sector but which meets the high priority criteria should be considered high priority.

LOWER PRIORITY INDUSTRIES OR SECTORS
Sector U - Food and Kindred Products
Sector V - Textile Mills, Apparel, and Other Fabric Product Mfg.
Sector W - Furniture and Fixtures
Sector X - Printing and Publishing
Sector Y - Rubber, Miscellaneous Plastic Products, and Miscellaneous Mfg. Industries
Sector AA - Fabricated Metal Products (not SIC 3441)
Sector AB - Transportation Equipment, Industrial or Commercial Machinery
Sector AC - Electronic, Electrical, Photographic, and Optical Goods
Sector O - Steam Electric Generating Facilities (only natural gas-fueled and nuclear plants)

Factors to Consider Regarding Impacts to Human Health: Impacts to human health could result from industrial stormwater discharges containing suspended solids, sediment, acidic wastewater, oil and grease, metals, toxics or other pollutants of concern. In selecting a specific dollar value, Agency staff may consider the following:

- Impact or potential impact on drinking water supplies;
- Harm or increased risks to subsistence or commercial fisheries;
- Harm or increased risks to shellfish beds and shellfish harvesting;
- Causing or contributing to stream instability, including increased risk of flooding; and/or,

- Impact on primary or secondary contact recreation, or aesthetic or economic values.

Examples of interference with drinking water supplies include the closure of a drinking water intake or the decision to alter the treatment process or add additional treatment as a result of discharges from an industrial site. Impacts to subsistence or commercial fishing may result in fish advisories. Streambed instability could result in localized flooding, for example, that could cause property damage and impact public health due to water borne disease or increased habitat for insect pests. Beach closings are an example of impacts to primary contact recreation.

Factors to Consider Regarding Impacts on the Environment: Actual or potential impacts to the environment could also result from the discharge of polluted stormwater from industrial facilities. In selecting a dollar value from the appropriate range identified in the tables, Agency staff should consider the following:

- The types of pollutants that were, or could be, discharged;
- The quantity (i.e., the estimated or measured concentration or mass) of total suspended solids, sediment, oil, toxics, metals or other pollutant that was, or was potentially, discharged¹⁷;
- Any documented or reasonably presumed impacts or degradation, such as adverse impacts to life stages of aquatic life and other wildlife dependent on aquatic ecosystems, or adverse impacts on aquatic habitat including aquatic vegetation;
- Types and numbers of species impacted or potentially impacted;
- Exceedance of applicable water quality standards;
- Whether the stream provides habitat to species sensitive to pollutants of concern;
- Whether the stream is on the CWA §303(d) list as impaired by pollutants which could potentially be discharged from the site; and/or,
- Whether discharges contributed to or caused streambed instability, such as bank erosion or scouring, which could impact habitat.

In general, factors that could result in selection of a dollar value from the higher end of the range include more months of violation, numerous large and intense rain events, significantly inadequate control measures, poor site conditions, high priority industry, discharge to a 303(d) listed water or other sensitive waterbody, and/or violation of TMDLs or waste load allocations. Conversely, selection of a dollar value from the lower end of the range will generally be appropriate for fewer months of violation, fewer, smaller, and less intense rain events, less significant violations, lower priority industry, and/or better overall site conditions.

¹⁷ This could be based on monitoring data or on overall site conditions and best professional judgment.

**B FACTOR TABLES:
SELECT ONE OF THE FOLLOWING THREE TABLES
TO DETERMINE A “B” FACTOR**

All Industries/Sectors discharging to High Water Quality Water Bodies			
	Short-term noncompliance (< 7 months with violations and rainfall/snowmelt)	Medium-term noncompliance (7 – 24 months with violations and rainfall/snowmelt)	Long-term noncompliance (> 24 months with violations and rainfall/snowmelt)
Actual Impacts	\$10,000 – \$40,000	\$30,000 – \$75,000	\$40,000 – \$250,000
Potential Impacts	\$2,500 – \$15,000	\$7,500 – \$40,000	\$15,000 – \$100,000

All Industries/Sectors discharging to Medium Water Quality Water Bodies			
	Short term noncompliance (< 7 months with violations and rainfall/snowmelt)	Medium term noncompliance (7 – 24 months with violations and rainfall/snowmelt)	Long term noncompliance (> 24 months with violations and rainfall/snowmelt)
Actual Impacts	\$7,000 - \$30,000	\$20,000 - \$65,000	\$30,000 - \$200,000
Potential Impacts	\$2,000 - \$12,000	\$5,000 - \$30,000	\$10,000 - \$75,000

All Industries/Sectors discharging to Low Water Quality Water Bodies			
	Short term noncompliance (< 7 months with violations and rainfall/snowmelt)	Medium term noncompliance (7 – 24 months with violations and rainfall/snowmelt)	Long term noncompliance (> 24 months with violations and rainfall/snowmelt)
Actual Impacts	\$3,000 - \$25,000	\$12,000 - \$45,000	\$25,000 - \$150,000
Potential Impacts	\$1,000 - \$7,000	\$3,000 - \$25,000	\$5,000 – \$60,000

3. “D” FACTOR – NON-EFFLUENT LIMIT VIOLATIONS

The D Factor reflects the seriousness and significance of the non-numeric effluent limit violations. This guidance provides three tables to assist Agency staff in determining an appropriate D Factor. Agency staff should use the D Factor Table to select a preliminary

D Factor value for each applicable category of violation based solely on the seriousness of the violations. Staff should then use the Duration Adjustment Table to adjust the preliminary D Factor values based on the duration of noncompliance. If the facility discharged stormwater without obtaining the required NPDES permit, then the duration-adjusted D factor should be increased in accordance with Step 4 below. Finally, staff should use the Size-Sophistication Adjustment Table to adjust the D Factor to account for the relative size and sophistication of the defendant.

Steps 1 through 6 below describe how to use the three tables to determine an appropriate D Factor. As noted above, Step 4 applies only in cases where the defendant discharged stormwater without the required NPDES permit.

STEP 1: Determine a preliminary D Factor value for each category of violation using the D Factor Table and the guidance immediately following the table.

The D Factor Table includes five categories of potential permit violations (violation categories a, b, c, d, and e), with some violation categories divided into two subcategories (i and ii). Staff should determine which violation categories apply to a specific case and determine an appropriate D Factor value for each.

All deficiencies falling under each applicable violation category should be evaluated together and one value selected per violation category.

Where both subcategories within a violation category apply to a case, Agency staff should use the range of values under subcategory “i”, which generally covers the more egregious violations. For example, in a case where the SWPPP has major deficiencies (subcategory a.i) and is not maintained on site (subcategory a.ii), then staff should use the range of values under subcategory a.i to determine the D Factor value.

Where the severity or significance of the violation changes within a category during the duration of noncompliance, determine one appropriate value that reflects the overall seriousness throughout the period of noncompliance. Agency staff should use best professional judgment to make this determination. One way to do this, for example, is to calculate a weighted average.¹⁸

The size and sophistication of the owner and operator of the industrial activity should not be a consideration when selecting appropriate D Factor values. Size and sophistication of the owner/operator will be addressed under Step 5.

¹⁸ For example, when using a weighted average approach, if the appropriate D Factor value for category b (Failure to Implement Adequate Control Measures or to Take Corrective Actions Following Exceedances or Other Indication of Ineffective Control Measures) is a “5” for 12 months (e.g., no BMPs installed and/or implemented), and then a “3” for 3 months (e.g., some BMPs installed and implemented), and finally a “1” for 2 months (e.g., all major BMPs adequately implemented but some minor deficiencies remaining), the preliminary D Factor would be “4.2” based on the following equation: $[(5 \times 12 \text{ months}) + (3 \times 3 \text{ months}) + (1 \times 2 \text{ months})] \text{ divided by } 17 \text{ months} = 4.2$

Discharge without a Permit: In cases where the defendant discharged stormwater but failed to obtain the required NPDES permit, Agency staff should compare the applicable permit requirements (that is, what the defendant would have been required to do if it had obtained a permit) with the defendant’s actual stormwater management practices. Deficient stormwater management practices may include the failure to implement adequate control measures for minimizing the discharge of pollutants in stormwater runoff, including good housekeeping measures, and the failure to implement measures that ensure proper operation and maintenance of structural controls. All deficiencies should be evaluated using the D Factor Table. (Note that Step 4 applies in these cases.)

D FACTOR TABLE¹⁹	
TYPE OF VIOLATION	RANGE OF VALUES
PERMIT VIOLATIONS:	
a. No SWPPP or SWPPP Not in Compliance	
i. No SWPPP Developed or Major SWPPP Deficiencies	0.5 – 5
ii. Moderate to Minor SWPPP Deficiencies and/or No SWPPP Onsite	0.1 - 3
b. Failure to Implement Adequate Control Measures or to Take Corrective Actions Following Exceedances or Other Indication of Ineffective Control Measures	
c. Failure to Adequately Conduct or Report Compliance, Visual or Benchmark Monitoring	
i. Failure to Conduct or Properly Conduct Compliance, Visual, Benchmark, or Other Monitoring	1 - 5
ii. Failure to Properly Maintain, Prepare, or Timely Submit Reports	0.1 - 2
d. Failure to Conduct or Adequately Document Routine Inspections	
i. Failure to Conduct Inspection	1 – 3
ii. Failure to Adequately Document Inspection	0.1 – 2
e. Failure to Conduct or Adequately Document the Annual Comprehensive Site Evaluations	
i. Failure to Conduct Evaluation	3 – 5
ii. Failure to Adequately Document Evaluation	0.1 – 2

The paragraphs below provide guidance for selecting appropriate values from the D Factor Table for each category and subcategory of violation.

¹⁹ D Factor values may be fractions. Values less than one (1) should only be used for minor violations.

**(a) No SWPPP or SWPPP Not in Compliance with the Applicable NPDES Permit
(Category a in the D factor table)**

This violation category includes the failure to develop and maintain a written SWPPP that includes all elements required by the applicable permit. Required SWPPP elements are permit-specific but generally include the following requirements: to identify allowable and unallowable non-stormwater discharges; to test or evaluate discharges for the presence of non-stormwater and to certify that the testing has been conducted; to document the appropriate stormwater control measures used on the site, including both structural and nonstructural controls; to include information on endangered species and historic properties; to identify potential pollutant sources including chemicals the facility is required to report pursuant to EPCRA 313; to describe the comprehensive site evaluation; and, to sign, date and/or certify the SWPPP. Permits generally also require the permittee to update the SWPPP to include changes to control measures resulting from routine inspection findings, the comprehensive site evaluation, and reassessment of control measures following an exceedance of a benchmark.

Where the facility either does not have a written SWPPP or the SWPPP has major deficiencies, staff should use row a.i of the table. Staff should use row a.ii of the table in cases where the facility's written SWPPP has moderate to minor deficiencies, and/or the SWPPP is not maintained onsite. All SWPPP deficiencies should be evaluated together and a single value selected from either row a.i. or a.ii of the table.

Most SWPPP deficiencies and the failure to develop a written SWPPP should be treated as continuous violations, beginning with the initial date of noncompliance (e.g., the permit coverage date) until the date the SWPPP is satisfactorily completed or the deficiencies corrected. Certain minor SWPPP deficiencies may be treated as one-time violations.²⁰ This may be appropriate where the minor SWPPP deficiencies do not directly impact implementation of control measures or discharges of pollutants. This could include, for example, the failure to sign, date or certify the SWPPP document. The duration of noncompliance for a one-time violation would be one month or less.

To select a specific number from within the range of potential values under subcategory a.i or a.ii, Agency staff should assesses the number and significance of missing SWPPP elements and the overall impact the lack of an adequate written SWPPP had on the site. Generally, the greater number of key SWPPP elements missing, the higher the D Factor value should be. However, where an operator maintained a fairly clean facility despite the lack of a written and/or adequate SWPPP, then a value from the lower end of the range should be considered. Conversely, if the facility was not effectively controlling pollutants in stormwater discharges, then staff should consider selecting a value from the middle to high end of the range.

²⁰ This rule of thumb only applies to calculating a bottom line penalty for purposes of settlement. It does not apply to alleging violations or calculating a statutory maximum penalty.

(b) Failure to Implement Adequate Control Measures or to Take Corrective Actions Following Exceedances or Other Indication of Ineffective Control Measures (Category b in the D Factor table)

This violation category covers all control measures required by the permit, regulations and/or SWPPP that are deficient, i.e., structural and nonstructural control measures that were not properly developed, implemented, designed, installed, constructed, operated, or maintained. This includes programmatic controls including the requirement to develop and implement an adequate employee training program. Agency staff should consider all control measure deficiencies together when determining an appropriate D Factor value for this violation category.

To determine a specific value, Agency staff should consider the number and types of deficient control measures in relation to the characteristics of the site, any monitoring results, and the permit requirements. The value for deficient control measures should generally be higher where the number of deficient control measures is higher, and/or the importance of the deficient control measures is greater. In evaluating the significance of the deficient control measures, Agency staff should consider site-specific factors such as the pollutants present on the site, the exposure of these pollutants to rainfall or runoff, whether the existing control measures are adequate to minimize discharge of these pollutants, the locations of receiving waters and storm drains in relation to pollutant sources, site topography including slopes, and the erosivity of any disturbed soils. Factors to consider include, but are not limited to:

- Whether good housekeeping measures are adequate and in compliance with the permit and SWPPP, *e.g.*, whether there are exposed pollutants, overflowing or leaking debris receptacles, scattered trash, unswept streets, etc.;
- Whether the permittee developed Spill Prevention and Response procedures;
- Whether runoff is adequately managed and controlled;
- Whether the permittee adequately manages salt storage or raw materials storage;
- Whether the permittee adequately manages materials and waste disposal including:
 - Industrial wastes
 - Hazardous wastes
 - Equipment maintenance fluids including oil and grease
 - Contaminated soils
 - Raw materials
 - Petroleum products
 - Hazardous products;
- Whether the structural controls required by the permit have been properly designed, installed, and located, and whether they are being adequately operated and maintained (*e.g.*, were silt fences installed where required and properly trenched in, were oil/water separators installed correctly and are they being properly maintained, were fueling areas covered, etc.); and,

- Whether the permittee has developed and implemented employee training.

This violation category also applies where the NPDES permit requires the permittee to take corrective action following an indication that control measures are not adequate. Such indications can include unauthorized discharges, violations of numeric effluent limits, exceedances of water quality standards, and exceedances of benchmark values. For example, permits typically require the permittee to take corrective action when monitoring results, or an average of monitoring results, indicate that a benchmark has been exceeded. Such permit provisions typically require that, within a specified timeframe, the permittee (1) review the design, selection, installation and implementation of control measures to determine if modifications are necessary, and (2) implement the necessary modifications. In addition, permits typically require corrective action where deemed necessary based on findings from routine facility inspections, visual discharge monitoring, and the annual comprehensive site evaluations.

(c) Failure to Adequately Conduct or Report Compliance, Visual, or Benchmark Monitoring (Category c in the D Factor table)

This violation category includes the failure to conduct, or properly conduct, required monitoring. Monitoring includes visual monitoring of discharge points, as well as analytical monitoring of effluent to check against benchmarks or any effluent limits in the permit, and any other required monitoring. This category also includes the failure to maintain sampling or screening records as required by the permit; the failure to submit timely Discharge Monitoring Reports (DMRs) or other required compliance reports (such as failure to report unauthorized discharges); and the failure to certify DMRs or any other monitoring report required by the permit. Each month with required monitoring that was not conducted or was inadequate or undocumented is assumed to be one month of violation.

In selecting a specific value, Agency staff should consider the importance of the monitoring and reporting failures to the control of pollutant discharges from the site and to the integrity of the NPDES program. For example, the facility's failure to monitor affects its ability to ensure adequacy of control measures. In addition, when a facility consistently fails to monitor or report monitoring data to the NPDES permitting authority, that authority is deprived of information it needs to adequately address water quality issues in the receiving water.

Where the facility failed to conduct or properly conduct required monitoring, Agency staff should select a D Factor value from row c.i of the D Factor Table. Where the facility did conduct the required monitoring but failed to adequately document the results, maintain the records or report the findings, Agency staff should select a D Factor value from row c.ii.

(d) Failure to Conduct or Adequately Document Routine Inspections (Category d in the D Factor table)

This violation category includes the failure to conduct and document regular or routine facility inspections in accordance with permit requirements. Each month where required inspections were missed, inadequate or undocumented is assumed to be one month of violation. Agency staff should consider the importance of the inspection deficiencies to the control of pollutant discharges from the site. Generally, a higher D Factor would be appropriate where a greater number of inspections were missed or deficient, or where the frequency of required inspections is low.

Where the facility has failed to conduct or properly conduct required routine inspections, Agency staff should select a D Factor value from row d.i of the D Factor table. Where the facility conducted but failed to properly document routine inspections, staff should select a D Factor value from row d.ii of the D Factor table.

(e) Failure to Conduct or Adequately Document the Annual Comprehensive Site Evaluations (Category e in the D Factor Table)

This violation category includes the failure to properly conduct and document the annual comprehensive site evaluation. The total duration of noncompliance is one month for each missed or deficient annual evaluation. To select an appropriate D Factor value, Agency staff should consider the importance of the comprehensive site evaluation deficiencies to the control of pollutant discharges from the site and to the integrity of the NPDES program. The comprehensive site evaluation is generally extremely important as it requires the permittee to conduct a thorough review of its controls and compliance with its permit, and informs the facility regarding needed changes to the SWPPP and stormwater control measures. In addition, most permits require that the results of the annual comprehensive site evaluation be submitted as the facility's annual report. By failing to conduct or adequately document the evaluation, the facility is depriving the permitting authority of data it needs to properly address water quality concerns in the receiving water.

Where the facility failed to conduct or properly conduct one or more required annual comprehensive site evaluations, Agency staff should select a D Factor value from row e.i of the D Factor Table. Where the facility conducted but failed to properly document the comprehensive site evaluations, staff should select a D Factor value from row e.ii of the table.

STEP 2: Adjust the preliminary D Factor value based on the duration of noncompliance for each category of violation using the Duration Adjustment Table below.

Select an appropriate adjustment factor for each category of violation and multiply the preliminary D Factor value by that number. The duration of noncompliance, and therefore the duration multiplier, may be different for different categories of violation.

Duration Adjustment Table	
Duration	Multiplier
Less than 7 months	2
7 – 24 months	7
More than 24 months	15

For example, if the preliminary D Factor value for violation category b (Failure to Implement Adequate Control Measures or to Take Corrective Actions Following Exceedances or Other Indication of Ineffective Control Measures) is determined to be 4.2, and the duration of noncompliance for this violation category is 17 months, then the duration-adjusted D Factor value would be 4.2 times 7 or 29.4.

STEP 3: Determine the TOTAL duration-adjusted D Factor by adding together the duration-adjusted D Factors for each category of violation as follows:

Total Duration-Adjusted D Factor = (Duration-adjusted a) + (Duration-adjusted b) + (Duration-adjusted c) + (Duration-adjusted d) + (Duration-adjusted e)

STEP 4: For those cases where the defendant discharged stormwater but failed to obtain the required NPDES permit, the total duration-adjusted D Factor should be multiplied by 1.25.

This 25% increase ensures that defendants that failed to obtain a permit are treated more severely than another violator with equivalent deficiencies but having a permit.

STEP 5: Adjust the total duration-adjusted D Factor to account for the size and sophistication of the defendant using the Size-Sophistication D Factor Adjustment Table below.

Use the guidance following the table to select an appropriate adjustment factor from the Size-Sophistication Adjustment Table and multiply the total duration-adjusted D Factor value by that number.

Size-Sophistication Adjustment Table	
TIER	ADJUSTMENT FACTOR
1	0.25 – 0.75
2	0.75 – 1.25
3	1.0 – 2

The Size-Sophistication Adjustment Table provides a range of multipliers for three tiers of defendants. Tier 1 defendants are the smallest and least sophisticated and the multiplier

results in a reduction of the total D Factor by between 25% and 75%. Tier 3 defendants are the largest and most sophisticated and the multiplier allows Agency staff to increase the total D Factor by up to 100%. Tier 2 defendants are in between and a multiplier can be selected that either reduces or increases the total D Factor by up to 25%.

Because there is so much variability among the different industrial sectors, there are no hard and fast criteria for categorizing a defendant as Tier 1, 2 or 3. This determination requires best professional judgment and a case-specific evaluation of information relevant to the size and sophistication of a particular defendant. As a very general rule of thumb, Tier 3 will typically include large businesses or corporations, Tier 2 will typically include small to mid-sized businesses, and Tier 1 will typically include micro to small businesses. There is no single definition of large, mid-size or small business, however, and many definitions are industry-specific.

The factors and associated criteria below are intended as general guidance. Given case specific facts and circumstances, the examples provided below may not be relevant for a particular case. These factors should not be considered in isolation; rather staff should look at how these factors interact when determining which Tier best fits a defendant.

- Number of Facilities Owned or Operated by Defendant and Type of Ownership: Tier 3 companies are typically large businesses that operate numerous facilities. They often operate nationwide or regionally. Tier 1 companies are small or micro businesses that are typically sole proprietorships, partnerships or other small privately-owned companies. They typically operate no more than one facility. Tier 2 companies are small to mid-sized businesses that sometimes operate more than one facility, often within the same general area. They are often privately-owned businesses, corporations or partnerships.
- Number and Type of Employees: Typical Tier 1 companies may have 1 to 9 employees, whereas Tier 2 companies may have 10 to 99 employees, and Tier 3 companies may have 100 employees or more.
- Sophistication of the Company: Indicia of sophistication may include companies having a large and/or experienced management staff and training programs for employees, or whether the company operates in an industry that is accustomed to regulation.
- Annual Sales: Agency staff may not have access to this information for privately-owned businesses. However, if this information is available, it can be used along with other information to help determine the appropriate tier for a particular defendant.

Selecting a Specific Multiplier: After identifying the appropriate Tier for a case, Agency staff should select a specific multiplier from the range of values in the table above. All the criteria discussed above, as well as any other relevant information, should be considered when selecting an appropriate value. If there has been extensive outreach in

the area regarding stormwater requirements, then a somewhat higher multiplier may be appropriate.

The appropriate multiplier for a very small and unsophisticated company will generally be at the lower end of the Tier 1 range. The appropriate multiplier for many Tier 2 companies may be “1”, i.e., no adjustment to the D Factor. For other Tier 2 companies, it may be appropriate to increase or decrease the D Factor by up to 25% depending on whether the defendant is more similar to a small or large business. For Tier 3 companies, the D Factor can remain unadjusted or can be increased by up to 100%. It may be appropriate to increase the D Factor by up to 100% for cases involving large regional or national companies that operate a very large facility or multiple facilities and employ a large and/or sophisticated workforce.

Industrial Activities Owned/Operated by Municipalities: Some facilities, such as landfills, are operated by municipalities. Agency staff should use their discretion to determine whether the municipal permittee is more like a Tier 1, 2 or 3 entity.

STEP 6: To determine the dollar amount for the final D Factor component of the bottom-line penalty, multiply the final total D Factor value by \$1000.

4. GRAVITY ADJUSTMENT FACTORS

The 1995 CWA Settlement Penalty Policy discusses several potential factors that can be applied to the gravity component of the penalty calculation to either increase or decrease the gravity amount. Two of these factors, the History of Recalcitrance Adjustment Factor and the Quick Settlement Adjustment Factor, can be applied to industrial stormwater cases when appropriate. A description of these adjustment factors from the 1995 CWA Settlement Penalty Policy is shown in italics below.

History of Recalcitrance Adjustment Factor. The “recalcitrance” factor is used to increase the penalty based on a violator’s bad faith, or unjustified delay in preventing, mitigating or remedying the violation. Recalcitrance is also present if a violator failed to comply with an EPA issued administrative compliance order or a Section 308 information request, or with a prior state or local enforcement order. This factor is applied by multiplying the total gravity component by a percentage between zero and 150. In administrative penalty actions, violations of administrative compliance orders are not included in the recalcitrance calculation because EPA lacks the authority to seek penalties in the administrative forum for violations of administrative compliance orders.

A minimum recalcitrance factor of 10 percent is generally appropriate for each instance in which a violator fails to substantially comply in a timely manner with an administrative compliance order (“AO”), a Section 308 information request, or a state enforcement order. Thus, if a particular discharger violated three AOs, a minimum recalcitrance factor of 30 percent is generally appropriate. If a violator completely fails to comply with an AO or Section 308 request, a recalcitrance factor of 20 percent may be

appropriate for that failure, while if there were only minor violations of the AO or request, a recalcitrance factor of five percent may be appropriate for that violation.

Quick Settlement Adjustment Factor. In order to provide an extra incentive for violators to negotiate quickly and reasonably, and in recognition of a violator's cooperativeness, EPA may reduce the gravity amount by ten percent if EPA expects the violator to settle quickly. For purposes of this reduction factor, in Class I administrative enforcement actions, a quick settlement is when the violator signs an administrative consent order resolving the violations within four months of the date the complaint was issued or within four months of when the government first sent the violator a written offer to settle the case, whichever date is earlier. In Class II administrative enforcement actions and judicial cases, the controlling time period is six and twelve months, respectively. If the violator is not able to sign the consent order within this time period, this adjustment does not apply.

Civil Monetary Penalty Inflation Adjustment: Annual adjustments to the gravity component will be required to account for inflation beginning in January 2018 pursuant to the *2016 Civil Monetary Penalty Inflation Adjustment Rule* (2016 Rule), which was published on July 1, 2016 and became effective on August 1, 2016, and the Office of Enforcement and Compliance Assurance's (OECA) July 27, 2016 memorandum, *Amendments to the U.S. Environmental Protection Agency's Civil Penalty Policies to Account for Inflation (Effective August 1, 2016)*. The July 2016 memorandum provides guidance for implementing the 2016 Rule. As explained in the memorandum, EPA intends to globally adjust the penalty policy amounts for inflation annually beginning on or shortly before January 15, 2018.

C. LITIGATION CONSIDERATIONS

With the exception of the National Municipal Litigation Consideration (NMLC), Agency staff may consider whether any of the litigation considerations discussed in the 1995 CWA Settlement Penalty Policy are appropriate. Refer to the 1995 CWA Settlement Penalty Policy for guidance on applying the litigation considerations (www.epa.gov/compliance/resources/policies/civil/cwa/cwapol.pdf).

It is the Agency's view that the elements described in the NMLC are not pertinent to industrial stormwater cases despite the fact that the owner/operator may be a municipality. Under the 1995 CWA Settlement Penalty Policy, the considerations discussed in the NMLC would apply when a municipality failed to comply despite its good faith efforts to comply. The NMLC was developed primarily for cases where large capital expenditures were to be made. Because control measures under the industrial stormwater program are relatively inexpensive and easily implemented and maintained, the NMLC considerations are not generally relevant to development of settlement penalties for these cases.

D. ABILITY TO PAY

Agency staff should refer to the 1995 CWA Settlement Penalty Policy for guidance on applying the ability to pay adjustment factor.

(www.epa.gov/compliance/resources/policies/civil/cwa/cwapol.pdf).

E. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

Agency staff should refer to the 1995 CWA Settlement Penalty Policy and the Agency's Supplemental Environmental Projects (SEP) Policy for guidance on applying the SEP adjustment factor to bottom-line penalties in industrial stormwater cases.

**ATTACHMENT 1
 SUPPLEMENT GUIDANCE TO THE 1995 INTERIM CLEAN WATER ACT
 SETTLEMENT PENALTY POLICY FOR VIOLATIONS OF THE INDUSTRIAL
 STORMWATER REQUIREMENTS**

Case Name: _____

Date: _____

Prepared by: _____

SETTLEMENT PENALTY CALCULATION WORKSHEET

STEP	AMOUNT
1. Calculate Statutory Maximum Penalty (period of violations from _____ through _____)	
2. Economic Benefit (attach BEN printouts, with explanations for inputs/calculations)	
3. Total of Gravity Amounts (from Attachment 2)	
4. Economic Benefit + Unadjusted Gravity (lines 2 + 3)	
5. Gravity Adjustments	
a. Recalcitrance Factor _____ (0 to 150%) X line 3	
b. Civil Monetary Penalty Inflation Adjustment (if appropriate)	
c. Quick Settlement Reduction _____ (0 or 10%) X line 3	
d. Total Gravity Adjustments (negative amount if net gravity reduction) (lines 5.a. + 5.b. - 5.c.)	
6. Preliminary Penalty Amount (lines 4 + 5.d.)	
7. Litigation Consideration Reduction (if any)	
8. Ability to Pay Reduction (if any)	
9. Reduction for Supplemental Environmental Projects (if any)	
10. BOTTOM-LINE CASH SETTLEMENT PENALTY (line 6 less lines 7, 8 and 9.)	

ATTACHMENT 2: GRAVITY CALCULATION WORKSHEET

TABLE 1: A FACTOR	
MONTH	A FACTOR
TOTAL	

TABLE 2: B FACTOR			
WATER QUALITY CLASSIFICATION	DURATION OF NONCOMPLIANCE	ACTUAL OR POTENTIAL IMPACTS	B FACTOR AMOUNT (IN DOLLARS)

TABLE 3: D FACTOR – ADJUSTED FOR DURATION			
Category of Violation	Preliminary D Factor Value	Duration Multiplier	Duration-Adjusted D Factor Value
a			
b			
c			
d			
e			
TOTAL			

TABLE 4: TOTAL GRAVITY	
STEP	AMOUNT
1. TOTAL A FACTOR X \$1000	
2. B FACTOR (TABLE 1 ABOVE)	
3. TOTAL DURATION-ADJUSTED D FACTOR X \$1000	
4. D FACTOR SIZE-SOPHISTICATION ADJUSTMENT MULTIPLIER	
5. FINAL TOTAL D FACTOR (LINE 3 X LINE 4)	
6. FINAL GRAVITY AMOUNT (LINES 1 + 2 + 5)	

