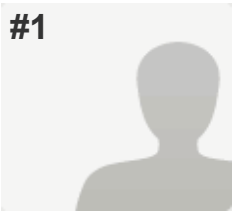


#1



Santa Fe, New Mexico

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	EPA Green Infrastructure Design and Implementation Manual
Permit (Please provide the name)	All MS4 permits across the state
Data Bases (e.g. International Database, TAPE, NJCAT)	International BMP Database

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Dissolved Copper	Primarily Regulated Pollutants
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Primarily Regulated Pollutants
Total Lead	Constituents of Potential Concern
Dissolved Lead	Primarily Regulated Pollutants
Total Cadmium	Constituents of Potential Concern
Dissolve Cadmium	Primarily Regulated Pollutants
Total Chromium	Constituents of Potential Concern
Dissolved Chromium	Primarily Regulated Pollutants
Total Nickel	Constituents of Potential Concern
Dissolved Nickel	Primarily Regulated Pollutants
Total Arsenic	Constituents of Potential Concern
Dissolved Arsenic	Primarily Regulated Pollutants

Radionuclides	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants
Ortho-phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Primarily Regulated Pollutants
Other (please specify)	
Dissolved oxygen	

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Mass loading for TMDL compliance, Permit Conditions
Suspended Solid Concentration	None of These
Turbidity	None of These
Total Dissolved Solids	None of These
Total copper	None of These
Dissolved copper	Permit Conditions
Total zinc	None of These
Dissolved zinc	Permit Conditions
Total lead	None of These
Dissolved lead	Permit Conditions
Total cadmium	None of These
Dissolved cadmium	Permit Conditions
Total chromium	None of These
Dissolved chromium	Permit Conditions

Total nickel	None of These
Dissolved nickel	Permit Conditions
Total arsenic	None of These
Dissolved arsenic	Permit Conditions
Radionuclides	Permit Conditions
Phosphorus	Permit Conditions
Ortho-phosphorus	Permit Conditions
Oil / Grease	Permit Conditions
Nitrogen	Permit Conditions
Nitrates	Permit Conditions
Nitrites	Permit Conditions
Ammonia	Permit Conditions
pH	Permit Conditions
Bacteria / Pathogens	Mass loading for TMDL compliance, Permit Conditions
PCBs	Mass loading for TMDL compliance, Permit Conditions
PAHs	None of These
Pesticides	Permit Conditions
Herbicides	Permit Conditions
BOD / COD	Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Dissolved copper	Hardness dependent
Dissolved zinc	Hardness dependent
Dissolved lead	Hardness dependent
Dissolved cadmium	Hardness dependent
Dissolved chromium	Hardness dependent
Dissolved nickel	Hardness dependent
Dissolved arsenic	Hardness dependent
pH	Generally between 6-9 SU
Bacteria / Pathogens	E. coli primary contact standard is 126 cfu/100mls
PCBs	HH-OO water quality standard is 0.64 ng/L

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,  
Pollutant concentration, Land use, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Self reporting through permit requirements
MS4	Self reporting through permit requirements
Construction	None Required

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

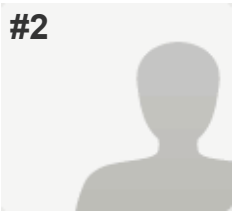
Soil screening values, Generator knowledge,  
Olfactory or visual observation

**PAGE 5: Contact information**

**Q11: Contact Information**

*Respondent skipped this question*

#2



Atlanta, Georgia

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PAGE 2: Pollutants of Concern

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**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Georgia Stormwater Management Manual

Permit (Please provide the name)

Phase I Large MS4, Phase I Medium MS4,  
Phase II MS4, Industrial General Permit

Other Guidance Document (Please provide the name)

Industrial Storm Water Fact Sheet Series,  
National Menu of Storm Water BMPs, National  
Management Measures to Control Nonpoint  
Source Pollution from Urban Areas

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**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Turbidity	Constituents of Potential Concern
Dissolved Copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Dissolved Zinc	Primarily Regulated Pollutants
Dissolved Lead	Primarily Regulated Pollutants
Dissolve Cadmium	Primarily Regulated Pollutants
Total Chromium	Primarily Regulated Pollutants
Dissolved Chromium	Primarily Regulated Pollutants
Dissolved Nickel	Primarily Regulated Pollutants
Total Arsenic	Primarily Regulated Pollutants
Dissolved Arsenic	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Trash	Constituents of Potential Concern

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**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant, Concentration limit of the effluent
Turbidity	Permit Conditions
Dissolved copper	Permit Conditions
Total zinc	Concentration limit of the effluent, Permit Conditions
Dissolved zinc	Permit Conditions
Dissolved lead	Permit Conditions
Dissolved cadmium	Permit Conditions
Total chromium	Concentration limit of the effluent, Permit Conditions
Dissolved chromium	Permit Conditions
Dissolved nickel	Permit Conditions
Total arsenic	Concentration limit of the effluent, Permit Conditions
Dissolved arsenic	Permit Conditions
Phosphorus	% Reduction or removal of influent pollutant, Permit Conditions
Oil / Grease	Concentration limit of the effluent, Permit Conditions
Nitrogen	% Reduction or removal of influent pollutant, Permit Conditions
Nitrates	% Reduction or removal of influent pollutant, Permit Conditions
Nitrites	% Reduction or removal of influent pollutant, Permit Conditions
Ammonia	Concentration limit of the effluent, Permit Conditions
pH	Concentration limit of the effluent, Permit Conditions
Bacteria / Pathogens	Concentration limit of the effluent, Permit Conditions
BOD / COD	Concentration limit of the effluent, Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	100 mg/L benchmark limit and impaired waters limit; 23.0 mg/L, daily maximum, 15.0 mg/L, 30-day avg. effluent limit (asphalt emulsion); 50 mg/L, daily maximum effluent limit (storage piles at cement; coal piles at steam electric generating); 88 mg/L, daily maximum, 27 mg/L, monthly avg. maximum effluent limit (haz waste facility; landfill); for MS4s, post-construction BMPs on sites must remove 80% of TSS from 1.2 inch rain
Turbidity	Measure in NTUs for benchmark limits
Dissolved copper	Hardness dependent (freshwater) benchmark limit; 0.0048 mg/L (saltwater) benchmark limit
Total Zinc	0.535 mg/L, daily maximum, 0.296 mg/L, monthly avg. maximum effluent limit (haz waste facility); 0.20 mg/L, daily maximum, 0.11 mg/L, monthly avg. maximum (landfill)
Dissolved zinc	Hardness dependent (freshwater) benchmark limit; 0.09 mg/L (saltwater) benchmark limit
Dissolved lead	Hardness dependent (freshwater) benchmark limit; 0.21 mg/L (saltwater) benchmark limit
Dissolved cadmium	Hardness dependent (freshwater) benchmark limit; 0.04 mg/L (saltwater) benchmark limit
Total chromium	1.1 mg/L, daily maximum, 0.46 mg/L, monthly avg. maximum effluent limit (haz waste facility)
Dissolved chromium	Measure in mg/L for benchmark limits
Total arsenic	1.1 mg/L, daily maximum, 0.54 mg/L, monthly avg. maximum effluent limit (haz waste facility)
Dissolved arsenic	0.15 mg/L (freshwater), 0.069 mg/L (saltwater) benchmark limit
Phosphorus	105.0 mg/L, daily maximum, 35 mg/L, 30-day avg. effluent limit
Oil / Grease	15 mg/L benchmark limit; 15.0 mg/L, daily maximum, 10 mg/L, 30-day avg. effluent limit (asphalt emulsion)
Nitrogen	0.68 mg/L benchmark limit
Nitrates	0.68 mg/L benchmark limit (nitrate + nitrite)
Nitrites	0.68 mg/L benchmark limit (nitrate + nitrite)
Ammonia	2.14 mg/L benchmark limit; 10 mg/L, daily maximum, 4.9 mg/L, monthly avg. maximum effluent limit (haz waste facility; landfill); 14.7 mg/L Daily Maximum effluent limit (ammonia as nitrogen; for airports with deicing)
pH	6.0 - 9.0 s.u. effluent limit and benchmark limit
Bacteria / Pathogens	4,000 counts/100 ml impaired waters limit
BOD / COD	COD: 120 mg/L benchmark limit; BOD: 30 mg/L benchmark limit; BOD: 220 mg/L, daily maximum, 56 mg/L, monthly avg. maximum effluent limit (hazardous waste facility); BOD: 140 mg/L, daily maximum, 37 mg/L, monthly avg. maximum effluent limit (landfill)



## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Other (please specify)  
We set limits. Individual facilities or municipalities select Stormwater BMPs. They can use any of the above listed characteristics.

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial

Routine Agency inspections, Event dependent Agency inspections, Self reporting through permit requirements

MS4

Routine Agency inspections, Event dependent Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial

Yes

MS4

Yes

Other (please specify)

Maintenance must be recorded in the SWPPP for industrial facilities; MS4s must document maintenance on post-construction BMPs

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
Other agencies in this state may be doing these things, but my program is not.

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

*Respondent skipped this question*

## PAGE 5: Contact information

**Q11: Contact Information**

Name

Anna Truszczynski

Agency

Georgia EPD - Stormwater

State/Province

Georgia

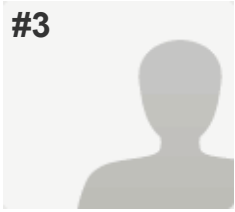
Email Address

anna.truszczynski@dnr.ga.gov

Phone Number

404-651-8548

#3



Jefferson City, Missouri

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PAGE 2: Pollutants of Concern

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**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	None
Permit (Please provide the name)	None
Data Bases (e.g. International Database, TAPE, NJCAT)	None
Other Guidance Document (Please provide the name)	None
Consultants	None
None (Please explain)	Missouri reviews their SWMP/ordinance/design criteria to ensure that they have long-term plans and strategies. Audits confirm that they are implementing them.

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**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Suspended Solid Concentration	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	None of These
Suspended Solid Concentration	None of These
Turbidity	None of These
Total Dissolved Solids	None of These
Total copper	None of These
Dissolved copper	None of These
Total zinc	None of These
Dissolved zinc	None of These
Total lead	None of These
Dissolved lead	None of These
Total cadmium	None of These
Dissolved cadmium	None of These
Total chromium	None of These

Dissolved chromium	None of These
Total nickel	None of These
Dissolved nickel	None of These
Total arsenic	None of These
Dissolved arsenic	None of These
Radionuclides	None of These
Phosphorus	None of These
Ortho-phosphorus	None of These
Oil / Grease	None of These
Nitrogen	None of These
Nitrates	None of These
Nitrites	None of These
Ammonia	None of These
pH	None of These
Bacteria / Pathogens	None of These
PCBs	None of These
PAHs	None of These
Pesticides	None of These
Herbicides	None of These
BOD / COD	None of These
Trash	None of These

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**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	No Concentrations/load/% removal
Suspended Solid Concentration	No Concentrations/load/% removal
Total Dissolved Solids	No Concentrations/load/% removal
Phosphorus	No Concentrations/load/% removal
Oil / Grease	No Concentrations/load/% removal
Nitrogen	No Concentrations/load/% removal
Nitrates	No Concentrations/load/% removal
Nitrites	No Concentrations/load/% removal
Ammonia	No Concentrations/load/% removal
pH	No Concentrations/load/% removal
Bacteria / Pathogens	No Concentrations/load/% removal
PCBs	No Concentrations/load/% removal
PAHs	No Concentrations/load/% removal
Pesticides	No Concentrations/load/% removal
Herbicides	No Concentrations/load/% removal
BOD / COD	No Concentrations/load/% removal
Trash	No Concentrations/load/% removal

### PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Other (please specify)  
I am guessing this is in regards to structural BMPs.  
We ensure that they are in place and maintained.

### PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

MS4 Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

MS4 Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Other (please explain) It is not

**PAGE 5: Contact information**

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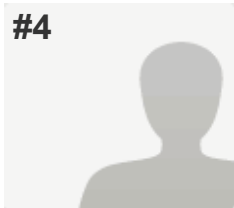
**Q11: Contact Information**

Name	Michael Abbott
Agency	Missouri DNR
State/Province	Missouri
Email Address	michael.abbott@dnr.mo.gov
Phone Number	573-526-1139

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#4

South St. Paul, Minnesota



## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Minnesota Stormwater Manual
Permit (Please provide the name)	MN0061018, MN R100001
Other Guidance Document (Please provide the name)	materials developed by many agencies incl. Center for Watershed Protection, MnDOT, Chesapeake Stormwater Network
Consultants	yes (many)
Other (Please identify or explain)	extensive internal staff experience

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Total copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant, Permit Conditions
Phosphorus	% Reduction or removal of influent pollutant, Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	70% removal from 1.25" Type II event
Phosphorus	% removal varies, based on water body

**PAGE 3: Stormwater Site Characteristics****Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Land use, Space restrictions, Receiving waters

**PAGE 4: Operation****Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections
Other types of monitoring (please specify)	Industrial program is MPCA responsibility

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Soil screening values

**PAGE 5: Contact information**

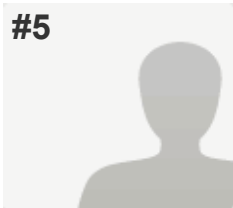


**Q11: Contact Information**

*Respondent skipped this question*

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#5



Las Cruces. New Mexico

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	NMDOT NPDES Manual
Permit (Please provide the name)	MS4 NPDES Permit
Data Bases (e.g. International Database, TAPE, NJCAT)	N/A
Other Guidance Document (Please provide the name)	Construction General Permit
Consultants	Bohannon Huston, Souder Miller
Other (Please identify or explain)	Stream Dynamics, Watershed Group

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Turbidity	Primarily Regulated Pollutants
Oil / Grease	Constituents of Potential Concern
Bacteria / Pathogens	Primarily Regulated Pollutants
Trash	Constituents of Potential Concern
Other (please specify) Aluminum	

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	None of These
Turbidity	None of These
Oil / Grease	None of These
Bacteria / Pathogens	None of These
Trash	None of These

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Dissolved Solids	2000mg/l per 20.6.4.900 NMAC STD's
Bacteria / Pathogens	126cfu/100mls per 20.6.4.900 NMAC STD's - Primary Contact

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**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Vegetation, Land use, Receiving waters

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**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Self reporting through permit requirements
MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Don't know
MS4	Don't know
Construction Stormwater	Don't know
Other (please specify) 1 year warrenty inspections	

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

*Respondent skipped this question*

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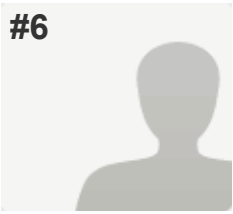
**PAGE 5: Contact information**

**Q11: Contact Information**

Name	Peter Bennett
Agency	City of Las Cruces
State/Province	NM
Email Address	pbennett@las-cruces.org
Phone Number	575-528-3075

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#6



Topeka, Kansas

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Other (Please identify or explain)

Best Professional Judgement

None (Please explain)

As the permitting authority we do not directly evaluate/oversee the selection of individual BMPs for the MS4 permittees in Kansas. Staff here do use professional judgement in determining the acceptance of the Post Construction control measures for the permittees.

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids

Primarily Regulated Pollutants

Phosphorus

Primarily Regulated Pollutants

Nitrogen

Primarily Regulated Pollutants

Bacteria / Pathogens

Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids

None of These

Ortho-phosphorus

None of These

Nitrogen

None of These

Bacteria / Pathogens

None of These

Other methods not listed (please explain)

Simply the implementation of BMPs which have demonstrated effective management of the pollutants in prior applications.

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Other (please specify)  
All of these characteristics can potentially be considered in the cas by case evaluation.

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Other types of monitoring (please specify)

Generally a simple presence - absence determination for confirmation of compliance with the MS4 NPDES permit.

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial

Don't know

MS4

No

Construction Stormwater

Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
Sediment evaluation and management of disposal is an issue which we anticipate addressing in the near future.

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Other (please explain) Often used as fill material.

**PAGE 5: Contact information**

**Q11: Contact Information**

Name

Rance Walker

Agency

Kansas Department of Health and Environment

State/Province

Kansas

Email Address

rance.walker@ks.gov

Phone Number

785.296.5537

**Q9: Is your State Agency or Municipality addressing:** *Respondent skipped this question*

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**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?** *Respondent skipped this question*

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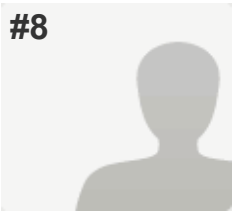
**PAGE 5: Contact information**

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**Q11: Contact Information** *Respondent skipped this question*

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#8



Wichita, Kansas

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Wichita/Sedgwick County Drainage Manual

Permit (Please provide the name)

M-AR94-S0001

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Other (please specify)

Our Permit requires that we reduce pollutanta to the maximum extent praticible. We do not have "required to be within regulatory limits established by statute or regulation"

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant
Turbidity	% Reduction or removal of influent pollutant
Phosphorus	% Reduction or removal of influent pollutant
Nitrogen	% Reduction or removal of influent pollutant
Nitrates	% Reduction or removal of influent pollutant
Nitrites	% Reduction or removal of influent pollutant
Ammonia	% Reduction or removal of influent pollutant
Bacteria / Pathogens	% Reduction or removal of influent pollutant
BOD / COD	% Reduction or removal of influent pollutant

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids

80%

## PAGE 3: Stormwater Site Characteristics



**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Pollutant concentration, Receiving waters

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**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

MS4

Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

MS4

Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Soil screening values

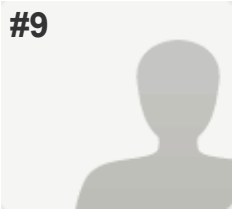
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**PAGE 5: Contact information**

**Q11: Contact Information**

*Respondent skipped this question*

#9



Bismarck, North Dakota

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	AASHTO Construction Stormwater Field Guide
Permit (Please provide the name)	North Dakota NPDES Construction General Permit and Small MS4 General Permit
Data Bases (e.g. International Database, TAPE, NJCAT)	NA
Other Guidance Document (Please provide the name)	ND spec book
Consultants	NA

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Dissolved Lead	Constituents of Potential Concern
Total Cadmium	Constituents of Potential Concern
Dissolve Cadmium	Constituents of Potential Concern
Total Chromium	Constituents of Potential Concern
Dissolved Chromium	Constituents of Potential Concern
Total Nickel	Constituents of Potential Concern
Dissolved Nickel	Constituents of Potential Concern
Total Arsenic	Constituents of Potential Concern

Dissolved Arsenic	Constituents of Potential Concern
Radionuclides	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Mass loading for TMDL compliance, Permit Conditions
Suspended Solid Concentration	Mass loading for TMDL compliance, Permit Conditions
Turbidity	Mass loading for TMDL compliance, Permit Conditions
Total Dissolved Solids	Mass loading for TMDL compliance, Permit Conditions
Total copper	Mass loading for TMDL compliance, Permit Conditions
Dissolved copper	Mass loading for TMDL compliance, Permit Conditions
Total zinc	Mass loading for TMDL compliance, Permit Conditions
Dissolved zinc	Mass loading for TMDL compliance, Permit Conditions
Total lead	Mass loading for TMDL compliance, Permit Conditions

Dissolved lead	Mass loading for TMDL compliance, Permit Conditions
Total cadmium	Mass loading for TMDL compliance, Permit Conditions
Dissolved cadmium	Mass loading for TMDL compliance, Permit Conditions
Total chromium	Mass loading for TMDL compliance, Permit Conditions
Dissolved chromium	Mass loading for TMDL compliance, Permit Conditions
Total nickel	Mass loading for TMDL compliance, Permit Conditions
Dissolved nickel	Mass loading for TMDL compliance, Permit Conditions
Total arsenic	Mass loading for TMDL compliance, Permit Conditions
Dissolved arsenic	Mass loading for TMDL compliance, Permit Conditions
Radionuclides	Mass loading for TMDL compliance, Permit Conditions
Phosphorus	Mass loading for TMDL compliance, Permit Conditions
Ortho-phosphorus	Mass loading for TMDL compliance, Permit Conditions
Oil / Grease	Mass loading for TMDL compliance, Permit Conditions
Nitrogen	Mass loading for TMDL compliance, Permit Conditions
Nitrates	Mass loading for TMDL compliance, Permit Conditions
Nitrites	Mass loading for TMDL compliance, Permit Conditions
Ammonia	Mass loading for TMDL compliance, Permit Conditions
pH	Mass loading for TMDL compliance, Permit Conditions
Bacteria / Pathogens	Mass loading for TMDL compliance, Permit Conditions
PCBs	Mass loading for TMDL compliance, Permit Conditions
PAHs	Mass loading for TMDL compliance, Permit Conditions

Pesticides	Mass loading for TMDL compliance, Permit Conditions
Herbicides	Mass loading for TMDL compliance, Permit Conditions
BOD / COD	Mass loading for TMDL compliance, Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

### PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,  
Space restrictions

### PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections
MS4	Routine Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Generator knowledge

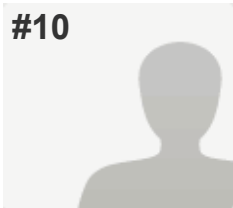
### PAGE 5: Contact information

**Q11: Contact Information**

Name	Anna Hjelmstad
Agency	NDDOT
State/Province	ND
Email Address	adhjelmstad@nd.gov
Phone Number	701-328-4592

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#10



Harrisburg, Pennsylvania

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

PA Stormwater BMP Manual

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids

Primarily Regulated Pollutants

Phosphorus

Primarily Regulated Pollutants

Nitrates

Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids

% Reduction or removal of influent pollutant

Phosphorus

% Reduction or removal of influent pollutant

Nitrates

% Reduction or removal of influent pollutant

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids

85% removal

Phosphorus

85% removal

Nitrates

50% removal

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Land use

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Self reporting through permit requirements
MS4	Self reporting through permit requirements
Construction	Routine Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

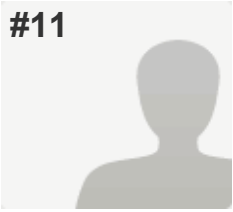
Soil screening values

**PAGE 5: Contact information****Q11: Contact Information**

Name	Sean
Agency	PADEP
State/Province	PA
Email Address	sefurjanic@pa.gov



#11



Salem, Oregon

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

City of Portland Stormwater Management Manual

Permit (Please provide the name)

Oregon DEQ NPDES 1200Z Industrial Stormwater General Permit

Data Bases (e.g. International Database, TAPE, NJCAT)

International BMP database

Other Guidance Document (Please provide the name)

Template to adapt for manual on Low Impact Development in Western Oregon

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Primarily Regulated Pollutants
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Primarily Regulated Pollutants
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Primarily Regulated Pollutants
Dissolved Lead	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Primarily Regulated Pollutants

---

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant, Concentration limit of the effluent, Permit Conditions
Total Dissolved Solids	Concentration limit of the effluent, Permit Conditions
Total copper	Concentration limit of the effluent, Mass loading for TMDL compliance, Permit Conditions
Total zinc	Concentration limit of the effluent, Permit Conditions
Total lead	Concentration limit of the effluent, Permit Conditions
Phosphorus	% Reduction or removal of influent pollutant, Concentration limit of the effluent, Mass loading for TMDL compliance, Permit Conditions, All of these
Oil / Grease	Concentration limit of the effluent, Permit Conditions
pH	Concentration limit of the effluent, Permit Conditions
Bacteria / Pathogens	Concentration limit of the effluent, Permit Conditions
PCBs	Concentration limit of the effluent, Permit Conditions
PAHs	Concentration limit of the effluent, Permit Conditions
Pesticides	Concentration limit of the effluent, Permit Conditions
Herbicides	Concentration limit of the effluent, Permit Conditions
BOD / COD	Concentration limit of the effluent, Permit Conditions

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**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	30, 50 or 100 mg/L benchmark
Total copper	geographic, biotic ligand model derived benchmark
Total Zinc	geographic, hardness-based benchmark
Total lead	geographic, hardness-based benchmark
Phosphorus	geographic specific benchmark
Oil / Grease	10 mg/L benchmark
pH	5.5 - 9.0 SU
Bacteria / Pathogens	406 counts/100 mL

### PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Pollutant concentration, Receiving waters

### PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Effluent monitoring, Self reporting through permit requirements
MS4	Effluent monitoring, Self reporting through permit requirements
Construction	Event dependent Agency inspections, Effluent monitoring, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Don't know
MS4	Don't know
Construction Stormwater	Don't know

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Soil screening values

**PAGE 5: Contact information**

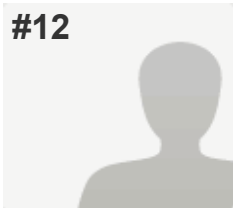
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**Q11: Contact Information**

Name	Alex Liverman
Agency	Department of Environmental Quality
State/Province	Oregon
Email Address	liverman.alex@deq.state.or.us
Phone Number	503-229-5080

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#12



Lansing, Michigan

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Michigan's Low Impact Development Manual
Data Bases (e.g. International Database, TAPE, NJCAT)	National Pollutant Removal Performance Database; NJCAT
Other (Please identify or explain)	Local BMP information included in performance standards manuals

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant, Concentration limit of the effluent
Suspended Solid Concentration	Concentration limit of the effluent
Turbidity	Permit Conditions
Phosphorus	Mass loading for TMDL compliance
Oil / Grease	Permit Conditions
Bacteria / Pathogens	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	80% removal
Suspended Solid Concentration	80 mg/l
Phosphorus	Load identified in TMDL
Bacteria / Pathogens	E. coli Water Quality Standard - Total Body Contact: 130 cts/100 ml as a geometric mean and no greater than 300 cts/100 ml at any time; Partial Body Contact: not to exceed 1000 cts/100 ml at any time

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### PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,  
Saturated media, Pollutant concentration, Land use,  
Space restrictions, Receiving waters

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### PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Effluent monitoring, Self reporting through permit requirements
MS4	Routine Agency inspections, Event dependent Agency inspections, Effluent monitoring, Self reporting through permit requirements
Construction	Routine Agency inspections, Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Known area of gross contamination ,  
Generator knowledge

PAGE 5: Contact information

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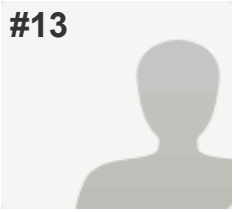
**Q11: Contact Information**

*Respondent skipped this question*

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#13



Salem, Oregon

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**PAGE 2: Pollutants of Concern**

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**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Portland

Permit (Please provide the name)

401

Data Bases (e.g. International Database, TAPE, NJCAT)

Effective 303(d) list of Impaired Waterbodies

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Total Dissolved Solids	Primarily Regulated Pollutants
Dissolved Copper	Primarily Regulated Pollutants
Dissolved Zinc	Primarily Regulated Pollutants
Dissolved Lead	Primarily Regulated Pollutants
Dissolve Cadmium	Primarily Regulated Pollutants
Dissolved Chromium	Primarily Regulated Pollutants
Dissolved Nickel	Primarily Regulated Pollutants
Dissolved Arsenic	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Primarily Regulated Pollutants
Pesticides	Primarily Regulated Pollutants
Herbicides	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants

---

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Permit Conditions
Suspended Solid Concentration	Permit Conditions
Turbidity	Permit Conditions
Total Dissolved Solids	Permit Conditions
Dissolved copper	Permit Conditions
Dissolved zinc	Permit Conditions
Dissolved lead	Permit Conditions
Dissolved cadmium	Permit Conditions
Dissolved chromium	Permit Conditions
Dissolved nickel	Permit Conditions
Dissolved arsenic	Permit Conditions
Phosphorus	Permit Conditions
Ortho-phosphorus	Permit Conditions
Oil / Grease	Permit Conditions
Nitrates	Permit Conditions
Ammonia	Permit Conditions
pH	Permit Conditions
Bacteria / Pathogens	Permit Conditions
PCBs	Permit Conditions
PAHs	Permit Conditions
Pesticides	Permit Conditions
Herbicides	Permit Conditions
BOD / COD	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Land use, Receiving waters

**PAGE 4: Operation**

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**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

*Respondent skipped this question*

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**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

*Respondent skipped this question*

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**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

*Respondent skipped this question*

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**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

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**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

*Respondent skipped this question*

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**PAGE 5: Contact information**

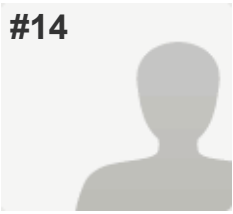
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**Q11: Contact Information**

*Respondent skipped this question*

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#14



Gresham, Oregon

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PAGE 2: Pollutants of Concern

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**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

City of Gresham Green Practices Manual

Permit (Please provide the name)

NPDES

Data Bases (e.g. International Database, TAPE, NJCAT)

International Database

Other (Please identify or explain)

Association of Clean Water Agencies discussions

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**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Dissolved Lead	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern

---

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant, Mass loading for TMDL compliance
Turbidity	% Reduction or removal of influent pollutant
Total copper	% Reduction or removal of influent pollutant
Dissolved copper	% Reduction or removal of influent pollutant
Total zinc	% Reduction or removal of influent pollutant
Dissolved zinc	% Reduction or removal of influent pollutant
Total lead	% Reduction or removal of influent pollutant
Dissolved lead	% Reduction or removal of influent pollutant
Phosphorus	% Reduction or removal of influent pollutant, Mass loading for TMDL compliance
Ortho-phosphorus	% Reduction or removal of influent pollutant
Oil / Grease	% Reduction or removal of influent pollutant
Nitrogen	% Reduction or removal of influent pollutant
Nitrates	% Reduction or removal of influent pollutant
Nitrites	% Reduction or removal of influent pollutant
Ammonia	% Reduction or removal of influent pollutant
pH	% Reduction or removal of influent pollutant, Mass loading for TMDL compliance
Bacteria / Pathogens	% Reduction or removal of influent pollutant, Mass loading for TMDL compliance
PCBs	% Reduction or removal of influent pollutant
PAHs	% Reduction or removal of influent pollutant
Pesticides	% Reduction or removal of influent pollutant
Herbicides	% Reduction or removal of influent pollutant, Mass loading for TMDL compliance
BOD / COD	% Reduction or removal of influent pollutant

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,  
Space restrictions

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections
MS4	Routine Agency inspections, Event dependent Agency inspections, Effluent monitoring, Self reporting through permit requirements
Construction	Routine Agency inspections, Event dependent Agency inspections, Effluent monitoring

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Generator knowledge

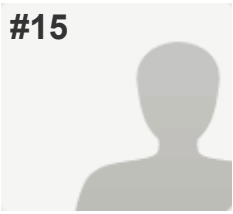
**PAGE 5: Contact information**

**Q11: Contact Information**

*Respondent skipped this question*



#15



Medford, Oregon

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	City of Gresham Stormwater Manual and Portland's
Permit (Please provide the name)	NPDES MS4 Permit Phase I
Data Bases (e.g. International Database, TAPE, NJCAT)	Stormwater BMP Database

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Total copper	Constituents of Potential Concern
Dissolved Copper	Primarily Regulated Pollutants
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Primarily Regulated Pollutants
Total Lead	Constituents of Potential Concern
Dissolved Lead	Primarily Regulated Pollutants
Total Cadmium	Constituents of Potential Concern
Dissolve Cadmium	Primarily Regulated Pollutants
Total Chromium	Constituents of Potential Concern
Dissolved Chromium	Primarily Regulated Pollutants
Total Nickel	Constituents of Potential Concern
Dissolved Nickel	Primarily Regulated Pollutants
Total Arsenic	Constituents of Potential Concern
Dissolved Arsenic	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Ortho-phosphorus	Primarily Regulated Pollutants

Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Constituents of Potential Concern
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Primarily Regulated Pollutants
Pesticides	Primarily Regulated Pollutants
Herbicides	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Trash	Primarily Regulated Pollutants
Other (please specify) Temperature, Mercury	

---

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Concentration limit of the effluent
Suspended Solid Concentration	None of These
Turbidity	Concentration limit of the effluent
Total Dissolved Solids	Concentration limit of the effluent
Total copper	Concentration limit of the effluent
Dissolved copper	Concentration limit of the effluent
Total zinc	Concentration limit of the effluent
Dissolved zinc	Concentration limit of the effluent
Total lead	Concentration limit of the effluent
Dissolved lead	Concentration limit of the effluent
Total cadmium	Concentration limit of the effluent
Dissolved cadmium	Concentration limit of the effluent
Total chromium	Concentration limit of the effluent
Dissolved chromium	Concentration limit of the effluent
Total nickel	Concentration limit of the effluent
Dissolved nickel	Concentration limit of the effluent
Total arsenic	Concentration limit of the effluent

Dissolved arsenic	Concentration limit of the effluent
Radionuclides	None of These
Phosphorus	Concentration limit of the effluent
Ortho-phosphorus	Concentration limit of the effluent
Oil / Grease	Concentration limit of the effluent
Nitrogen	Concentration limit of the effluent
Nitrates	Concentration limit of the effluent
Nitrites	Concentration limit of the effluent
Ammonia	None of These
pH	Concentration limit of the effluent
Bacteria / Pathogens	Concentration limit of the effluent
PCBs	Concentration limit of the effluent
PAHs	Concentration limit of the effluent
Pesticides	Concentration limit of the effluent
Herbicides	Concentration limit of the effluent
BOD / COD	Concentration limit of the effluent
Trash	None of These
Other methods not listed (please explain)	temperature, mercury (same--inlet and outlet monitoring)

---

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	not more than 5% above natural background
Suspended Solid Concentration	NA
Turbidity	not more than 5% above natural background
Total Dissolved Solids	NA
Total copper	based on hardness
Dissolved copper	based on hardness
Total Zinz	based on hardness
Dissolved zinc	based on hardness
Total lead	based on hardness
Dissolved lead	based on hardness
Total cadmium	based on hardness
Dissolved cadmium	based on hardness
Total chromium	based on hardness
Dissolved chromium	based on hardness
Total nickel	based on hardness
Dissolved nickel	based on hardness
Total arsenic	based on hardness
Dissolved arsenic	based on hardness
Radionuclides	NA
Phosphorus	.1549 mg/L per specific TMDL
Ortho-phosphorus	NA
Oil / Grease	NA
Nitrogen	NA
Nitrates	NA
Nitrites	NA
Ammonia	NA
pH	between 6.5 and 8.5
Bacteria / Pathogens	406 organisms/100mL
PCBs	Acute 2.0 microgram/L Chronic .014 microg/L per OAR Table 30
PAHs	NA (saltwater limit only per OAR Table 30)
Pesticides	DDT Acute 1.1 microg/L Chronic .001 microg/L per OAR Table 30
Herbicides	NA
BOD / COD	we monitor for DO
Trash	NA

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Temperature,  
 Long dry periods, Saturated media,  
 Pollutant concentration, Land use,  
 Space restrictions,  
 Other (please specify)  
 we treat all waterbodies equally

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Event dependent Agency inspections, Effluent monitoring, Self reporting through permit requirements
MS4	Routine Agency inspections, Event dependent Agency inspections, Effluent monitoring
Construction	Routine Agency inspections, Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	No
Other (please specify) Maintenance of stormwater facilities or filter vaults and catch basins is required as proof, all other housekeeping, no. DEQ is responsible for monitoring and inspecting industrial, we only do it for complaints and wellfield protection.	

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
 Sediment has never been found to be hazardous, there are numerous outlets for disposal. DEQ requires pollutant characterization of some sectors for the 1200Z indus permit.

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Other (please explain) NA

**PAGE 5: Contact information**

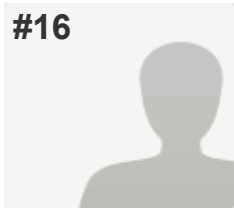
**Q11: Contact Information**

Name	Handaly
Agency	City of Gresham
State/Province	OR
Email Address	Keri.Handaly@GreshamOregon.gov
Phone Number	503-734-5604

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#16

Salt Lake City, Utah



PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Salt Lake County Stormwater Guidance Document
Permit (Please provide the name)	UPDES Municipal Stormwater Permit - Jordan Valley Municipalities Permit No. UTS000001
Data Bases (e.g. International Database, TAPE, NJCAT)	International Database
Other Guidance Document (Please provide the name)	none
Consultants	Stantec
Other (Please identify or explain)	None
None (Please explain)	A LID bmp implementation manual is being developed

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Dissolved Lead	Constituents of Potential Concern
Total Cadmium	Constituents of Potential Concern
Dissolve Cadmium	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

*Respondent skipped this question*

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

*Respondent skipped this question*

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Construction

Routine Agency inspections, Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

*Respondent skipped this question*

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

*Respondent skipped this question*

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

*Respondent skipped this question*

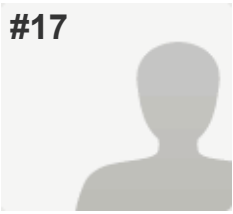
**PAGE 5: Contact information**

**Q11: Contact Information**

*Respondent skipped this question*



#17



Phoenix, Arizona

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	ADOT Post-Construction BMPs
Permit (Please provide the name)	Phase I MS4
Data Bases (e.g. International Database, TAPE, NJCAT)	TAPE
Other Guidance Document (Please provide the name)	Pima County LID
Consultants	J2, Logan Simpson
Other (Please identify or explain)	USEPA Library

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Dissolved Lead	Constituents of Potential Concern
Total Cadmium	Constituents of Potential Concern
Dissolve Cadmium	Constituents of Potential Concern
Total Chromium	Constituents of Potential Concern
Dissolved Chromium	Constituents of Potential Concern
Total Nickel	Constituents of Potential Concern
Dissolved Nickel	Constituents of Potential Concern

Total Arsenic	Constituents of Potential Concern
Dissolved Arsenic	Constituents of Potential Concern
Radionuclides	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant
Suspended Solid Concentration	None of These
Turbidity	None of These
Total Dissolved Solids	None of These
Total copper	None of These
Dissolved copper	None of These
Total zinc	None of These
Dissolved zinc	None of These
Total lead	None of These
Dissolved lead	None of These
Total cadmium	None of These
Dissolved cadmium	None of These
Total chromium	None of These
Dissolved chromium	None of These
Total nickel	None of These

Dissolved nickel	None of These
Total arsenic	None of These
Dissolved arsenic	None of These
Radionuclides	None of These
Phosphorus	None of These
Ortho-phosphorus	None of These
Oil / Grease	None of These
Nitrogen	None of These
Nitrates	None of These
Nitrites	None of These
Ammonia	None of These
pH	None of These
Bacteria / Pathogens	None of These
PCBs	None of These
PAHs	None of These
Pesticides	None of These
Herbicides	None of These
BOD / COD	None of These
Trash	None of These

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**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	95%
Suspended Solid Concentration	NA
Turbidity	NA
Total Dissolved Solids	NA
Total copper	NA
Dissolved copper	NA
Total Zinz	NA
Dissolved zinc	NA
Total lead	NA
Dissolved lead	NA
Total cadmium	NA
Dissolved cadmium	NA
Total chromium	NA
Dissolved chromium	NA
Total nickel	NA
Dissolved nickel	NA
Total arsenic	NA
Dissolved arsenic	NA
Radionuclides	NA
Phosphorus	NA
Ortho-phosphorus	NA
Oil / Grease	NA
Nitrogen	NA
Nitrates	NA
Nitrites	NA
Ammonia	NA
pH	NA
Bacteria / Pathogens	NA
PCBs	NA
PAHs	NA
Pesticides	NA
Herbicides	NA
BOD / COD	NA
Trash	NA

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**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Land use, Space restrictions

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	None Required
MS4	None Required
Construction	Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain) none

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

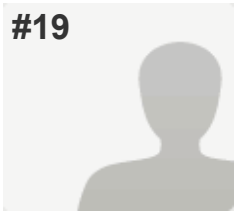
Other (please explain) none

**PAGE 5: Contact information**

**Q11: Contact Information**

Email Address	leigh.padgitt@phoenix.gov
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#19



Janesville, Wisconsin

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PAGE 2: Pollutants of Concern

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**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Iowa stormwater management manual

Permit (Please provide the name)

Ms4

Consultants

rdg

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**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Dissolved Lead	Constituents of Potential Concern
Total Chromium	Constituents of Potential Concern
Dissolved Chromium	Constituents of Potential Concern
Total Nickel	Constituents of Potential Concern
Dissolved Nickel	Constituents of Potential Concern
Total Arsenic	Constituents of Potential Concern
Dissolved Arsenic	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	None of These
Suspended Solid Concentration	None of These
Turbidity	None of These
Total Dissolved Solids	None of These
Total copper	None of These
Dissolved copper	None of These
Total zinc	None of These
Dissolved zinc	None of These
Total lead	None of These
Dissolved lead	None of These
Total cadmium	None of These
Dissolved cadmium	None of These
Total chromium	None of These
Dissolved chromium	None of These
Total nickel	None of These
Dissolved nickel	None of These
Total arsenic	None of These
Dissolved arsenic	None of These
Radionuclides	None of These
Phosphorus	None of These
Ortho-phosphorus	None of These
Oil / Grease	None of These
Nitrogen	None of These
Nitrates	None of These
Nitrites	None of These
Ammonia	None of These
pH	None of These
Bacteria / Pathogens	None of These
PCBs	None of These
PAHs	None of These
Pesticides	None of These
Herbicides	None of These
BOD / COD	None of These
Trash	None of These



**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

### PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Land use

### PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	None Required
MS4	Routine Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Don't know
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

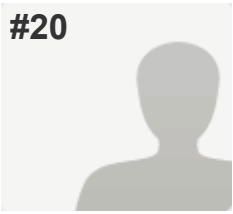
Known area of gross contamination

### PAGE 5: Contact information

**Q11: Contact Information**

*Respondent skipped this question*

#20



Dubuque, Iowa

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

ISWMM

Permit (Please provide the name)

MS4 permit Phase II

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids

Constituents of Potential Concern

Phosphorus

Constituents of Potential Concern

Oil / Grease

Constituents of Potential Concern

Nitrogen

Constituents of Potential Concern

Bacteria / Pathogens

Constituents of Potential Concern

Trash

Constituents of Potential Concern

Other (please specify)

Chlorides, Conductivity

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids

None of These

Phosphorus

None of These

Oil / Grease

None of These

Nitrogen

None of These

Bacteria / Pathogens

None of These

Trash

None of These

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Land use,  
Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Effluent monitoring
MS4	Routine Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

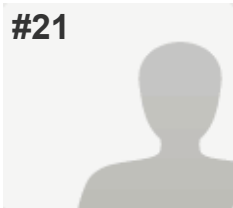
*Respondent skipped this question*

**PAGE 5: Contact information**

**Q11: Contact Information**

Name	Dean Mattoon
Agency	City of Dubuque
State/Province	Iowa
Email Address	dmattoon@cityofdubuque.org
Phone Number	563-543-8460

#21



Hartford, Connecticut

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	CT Stormwater Quality manual
Permit (Please provide the name)	MS4 permit, Construction General Permit
Data Bases (e.g. International Database, TAPE, NJCAT)	TAPE, NJCAT

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Permit Conditions
Turbidity	Permit Conditions
Phosphorus	Permit Conditions
Nitrogen	Permit Conditions
Nitrates	Permit Conditions
pH	Permit Conditions
Bacteria / Pathogens	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Land use,  
Space restrictions, Receiving waters

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Effluent monitoring, Self reporting through permit requirements
MS4	Effluent monitoring, Self reporting through permit requirements
Construction	Effluent monitoring, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

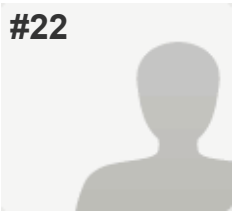
Other (please explain) Representative sample

## PAGE 5: Contact information

**Q11: Contact Information**

*Respondent skipped this question*

#22



Lake Havasu City, Arizona

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Mohave County Drainage Design Manual
Permit (Please provide the name)	AZG2016-002
Other Guidance Document (Please provide the name)	EPA Green Infrastructure
None (Please explain)	Performing plans reviews for commercial properties for a municipality

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Oil / Grease	Primarily Regulated Pollutants
Trash	Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Oil / Grease	Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Topography, Land use,  
Space restrictions, Receiving waters

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Event dependent Agency inspections
MS4	Event dependent Agency inspections
Construction	Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Don't know
MS4	Yes
Construction Stormwater	Don't know

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
 Stormwater & Construction & Post-construction programs look good on paper, but no funding or personnel specifically tasked in this area isn't happening

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

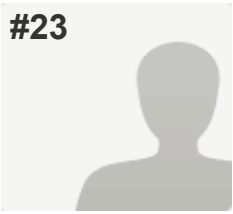
Olfactory or visual observation

**PAGE 5: Contact information**

**Q11: Contact Information**

Name	scott mitchell
Agency	lake havasu city
State/Province	AZ
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Phone Number	9286895465

#23



Davenport, Iowa

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Iowa Storm Water Management Manual
Permit (Please provide the name)	NPDES #2 & MS4
Other Guidance Document (Please provide the name)	Davenport Stormwater Management Manual

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Primarily Regulated Pollutants
Dissolved Copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Dissolved Zinc	Primarily Regulated Pollutants
Total Lead	Primarily Regulated Pollutants
Dissolved Lead	Primarily Regulated Pollutants
Total Cadmium	Primarily Regulated Pollutants
Dissolve Cadmium	Primarily Regulated Pollutants
Total Chromium	Primarily Regulated Pollutants
Dissolved Chromium	Primarily Regulated Pollutants
Total Nickel	Primarily Regulated Pollutants
Dissolved Nickel	Primarily Regulated Pollutants
Total Arsenic	Primarily Regulated Pollutants
Dissolved Arsenic	Primarily Regulated Pollutants
Radionuclides	Primarily Regulated Pollutants



Phosphorus	Constituents of Potential Concern
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
PCBs	Primarily Regulated Pollutants
PAHs	Primarily Regulated Pollutants
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	None of These
Suspended Solid Concentration	None of These
Turbidity	None of These
Total Dissolved Solids	None of These
Total copper	None of These
Dissolved copper	None of These
Total zinc	None of These
Dissolved zinc	None of These
Total lead	None of These
Dissolved lead	None of These
Total cadmium	None of These
Dissolved cadmium	None of These
Total chromium	None of These
Dissolved chromium	None of These
Total nickel	None of These
Dissolved nickel	None of These
Total arsenic	None of These

Dissolved arsenic	None of These
Radionuclides	None of These
Phosphorus	None of These
Ortho-phosphorus	None of These
Oil / Grease	None of These
Nitrogen	None of These
Nitrates	None of These
Nitrites	None of These
Ammonia	None of These
pH	None of These
Bacteria / Pathogens	None of These
PCBs	None of These
PAHs	None of These
Pesticides	None of These
Herbicides	None of These
BOD / COD	None of These
Trash	None of These
Other methods not listed (please explain)	Basin/WQ BMP inspections every 5 years to ensure they are functioning as designed. Reductions and removals are per initial design. Testing done in rare occasions.

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Bacteria / Pathogens	80%
Trash	100%

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,  
Space restrictions, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections
MS4	Routine Agency inspections
Construction	Routine Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	No
Construction Stormwater	Yes

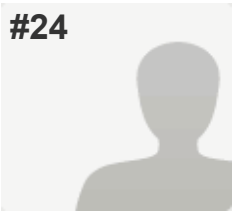
**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:***Respondent skipped this question***Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?***Respondent skipped this question***PAGE 5: Contact information****Q11: Contact Information**

Name	Amy Kay
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State/Province	Iowa
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Phone Number	5633275160

#24



Salt Lake City, Utah

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Salt Lake County Stormwater Guidance Document - Long term Stormwater Maintenance

Permit (Please provide the name)

UPDES Municipal Stormwater Permit - Jordan Valley Municipalities Permit No. UTS000001

Data Bases (e.g. International Database, TAPE, NJCAT)

CWP-07 Natl Pollutant Removal Performance

Other Guidance Document (Please provide the name)

Prince George County, Maryland LID Manual

Consultants

Stantec

Other (Please identify or explain)

Minnesota Pollution Control LID Manual

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Dissolved Lead	Constituents of Potential Concern
Total Cadmium	Constituents of Potential Concern
Dissolve Cadmium	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Other (please specify)	
Volatile Suspended Solids (VSS), CBOD, Hardness, Calcium, Magnesium	

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**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Permit Conditions
Total Dissolved Solids	Permit Conditions
Total copper	Permit Conditions
Dissolved copper	Permit Conditions
Total zinc	Permit Conditions
Dissolved zinc	Permit Conditions
Total lead	Permit Conditions
Dissolved lead	Permit Conditions
Total cadmium	Permit Conditions
Dissolved cadmium	Permit Conditions
Phosphorus	Permit Conditions
Ortho-phosphorus	Permit Conditions
Oil / Grease	Permit Conditions
Nitrogen	Permit Conditions
Nitrates	Permit Conditions
Nitrites	Permit Conditions
Ammonia	Permit Conditions
pH	Permit Conditions
Bacteria / Pathogens	Permit Conditions
BOD / COD	Permit Conditions
Other methods not listed (please explain)	Wet and Dry weather monitoring programs per permit

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	na for all
------------------------	------------

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Temperature,  
 Long dry periods, Saturated media,  
 Pollutant concentration, Land use,  
 Space restrictions, Receiving waters,  
 Other (please specify)  
 Dumping and spill evidence, bmp types

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Self reporting through permit requirements
MS4	Routine Agency inspections, Event dependent Agency inspections, Effluent monitoring, Self reporting through permit requirements
Construction	Routine Agency inspections, Event dependent Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance  
 ,  
 Economic impacts from BMP sediment disposal management  
 ,  
 Other (please explain)  
 Developed Salt Lake County dregding SOP

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Known area of gross contamination ,  
Soil screening values , Generator knowledge,  
Olfactory or visual observation ,  
Characteristics of the watershed ,  
Other (please explain)  
By regulatory requirements (FCWA, 401 Permit, Landfill)

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**PAGE 5: Contact information**

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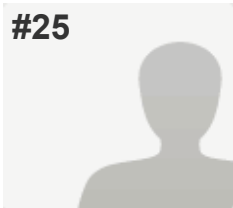
**Q11: Contact Information**

*Respondent skipped this question*

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#25



Tempe, Arizona

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Maricopa County Drainage Policies and Standards

Permit (Please provide the name)

Permit AZG2013-001

Other Guidance Document (Please provide the name)

City of Tempe Ordinance

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Turbidity

Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Turbidity

Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Turbidity

No OAW or Impaired Streams in municipal boundaries

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,

Long dry periods, Land use, Receiving waters

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Self reporting through permit requirements
MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
Neither the municipality or state are actively developing specific construction sediment disposal strategies.

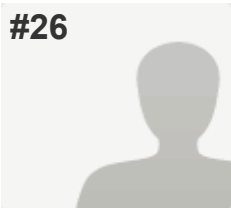
**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Generator knowledge

**PAGE 5: Contact information****Q11: Contact Information**

*Respondent skipped this question*

#26



Grand Rapids, Michigan

PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	SEMCOG, and we have developed our own specs
Permit (Please provide the name)	City of Grand Rapids, Michigan, MS4
Consultants	Tetra Tech - Dan Christian; Fishbeck Thompson, Carr & Huber; Moore & Bruggink

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Turbidity	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
pH	Constituents of Potential Concern
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant
------------------------	--

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	70% removal, changing to 80% in new permit
------------------------	--

PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Temperature,  
Long dry periods, Saturated media,  
Pollutant concentration, Land use,  
Space restrictions, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	None Required
MS4	Routine Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No
Other (please specify) Coming in new MS4 permit	

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Other (please explain)  
Typically just sent to Type II landfill

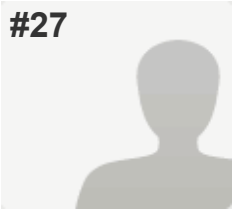
**PAGE 5: Contact information**

**Q11: Contact Information**

*Respondent skipped this question*

#27

Abingdon, West Virginia



## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	2013 Virginia Stormwater Management Handbook; Virginia Draft 2013 Stormwater BMP Design Specifications
Permit (Please provide the name)	General VPDES Permit for Discharges of Stormwater from Construction Activities (Virginia)
Data Bases (e.g. International Database, TAPE, NJCAT)	Virginia Stormwater BMP Clearinghouse; USDA Web Soil Survey; Virginia Environmental Geographic Information Systems (VEGIS); Chesapeake Stormwater Network; NOAA Atlas 14; FEMA Flood Map Service Center; Virginia Wetland Condition Assessment Tool; USDA NRCS Plants Database
Other (Please identify or explain)	USDA National Engineering Handbook; USGS Streamstats; EPA NPDES Website; Google Earth; Virginia DEQ Stormwater Guidance Documents; Virginia Runoff Reduction Method Worksheets; Center for Watershed Protection website

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Phosphorus	Primarily Regulated Pollutants
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**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Phosphorus	% Reduction or removal of influent pollutant
------------	--

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Phosphorus	Cannot exceed 0.41 lbs/acre/year for new development; reduce by 20% for re-development
------------	--

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Land use,  
Other (please specify)  
water table elevation; proximity of bedrock; mapped floodplain; hotspot land uses

---

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

MS4	Routine Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Don't know
MS4	No
Construction Stormwater	No

Other (please specify)

Operators are required to perform BMP maintenance and self inspections (inspection reports are to be made available to the regulatory authority upon request), but there are no requirements regarding monitoring/reporting of BMP performance

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain) None

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Other (please explain) None

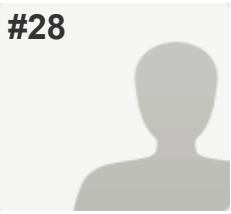
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**PAGE 5: Contact information**

**Q11: Contact Information**

Name	Jonathan Chapman
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#28



Scottsdale, Arizona

PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Permit (Please provide the name)

AZ Small MS4 General Permit

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Primarily Regulated Pollutants
Total Dissolved Solids	Constituents of Potential Concern
Total copper	Primarily Regulated Pollutants
Dissolved Copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Dissolved Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Dissolved Lead	Constituents of Potential Concern
Total Cadmium	Constituents of Potential Concern
Dissolve Cadmium	Constituents of Potential Concern
Total Chromium	Constituents of Potential Concern
Dissolved Chromium	Constituents of Potential Concern
Total Nickel	Constituents of Potential Concern
Dissolved Nickel	Constituents of Potential Concern
Total Arsenic	Constituents of Potential Concern
Dissolved Arsenic	Constituents of Potential Concern
Radionuclides	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern

Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant
Suspended Solid Concentration	Permit Conditions
Turbidity	% Reduction or removal of influent pollutant
Total Dissolved Solids	Permit Conditions
Total copper	Concentration limit of the effluent
Dissolved copper	None of These
Total zinc	Permit Conditions
Dissolved zinc	None of These
Total lead	Permit Conditions
Dissolved lead	None of These
Total cadmium	Permit Conditions
Dissolved cadmium	None of These
Total chromium	Permit Conditions
Dissolved chromium	None of These
Total nickel	Permit Conditions
Dissolved nickel	None of These
Total arsenic	Permit Conditions
Dissolved arsenic	None of These



Radionuclides	Permit Conditions
Phosphorus	Permit Conditions
Ortho-phosphorus	Permit Conditions
Oil / Grease	Permit Conditions
Nitrogen	Permit Conditions
Nitrates	Permit Conditions
Nitrites	Permit Conditions
Ammonia	Permit Conditions
pH	Permit Conditions
Bacteria / Pathogens	Concentration limit of the effluent
PCBs	Permit Conditions
PAHs	Permit Conditions
Pesticides	Permit Conditions
Herbicides	Permit Conditions
BOD / COD	Permit Conditions
Trash	Permit Conditions

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**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	applicable AZ surface water quality standard
Suspended Solid Concentration	applicable AZ surface water quality standard
Turbidity	applicable AZ surface water quality standard
Total Dissolved Solids	applicable AZ surface water quality standard
Total copper	applicable AZ surface water quality standard
Dissolved copper	applicable AZ surface water quality standard
Total Zinz	applicable AZ surface water quality standard
Dissolved zinc	applicable AZ surface water quality standard
Total lead	applicable AZ surface water quality standard
Dissolved lead	applicable AZ surface water quality standard
Total cadmium	applicable AZ surface water quality standard
Dissolved cadmium	applicable AZ surface water quality standard
Total chromium	applicable AZ surface water quality standard
Dissolved chromium	applicable AZ surface water quality standard
Total nickel	applicable AZ surface water quality standard
Dissolved nickel	applicable AZ surface water quality standard
Total arsenic	applicable AZ surface water quality standard
Dissolved arsenic	applicable AZ surface water quality standard
Radionuclides	applicable AZ surface water quality standard
Phosphorus	applicable AZ surface water quality standard
Ortho-phosphorus	applicable AZ surface water quality standard
Oil / Grease	applicable AZ surface water quality standard
Nitrogen	applicable AZ surface water quality standard
Nitrates	applicable AZ surface water quality standard
Nitrites	applicable AZ surface water quality standard
Ammonia	applicable AZ surface water quality standard
pH	applicable AZ surface water quality standard
Bacteria / Pathogens	applicable AZ surface water quality standard
PCBs	applicable AZ surface water quality standard
PAHs	applicable AZ surface water quality standard
Pesticides	applicable AZ surface water quality standard
Herbicides	applicable AZ surface water quality standard
BOD / COD	applicable AZ surface water quality standard
Trash	applicable AZ surface water quality standard

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Receiving waters

**PAGE 4: Operation****Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Event dependent Agency inspections
MS4	Event dependent Agency inspections
Construction	Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain) not currently addressing

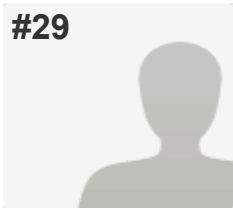
**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Olfactory or visual observation

**PAGE 5: Contact information****Q11: Contact Information**

Name	Christopher Henninger
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State/Province	Arizona
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Phone Number	602-771-4508

#29



Washington D. C

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

DOEE's 2013 Stormwater Management Guidebook, <https://doee.dc.gov/node/610622>

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Other (please specify)

Volume of stormwater runoff - regulations require retention

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Other methods not listed (please explain)

Regulations require retention of runoff (retention of volume from 1.2" storm required for most projects)- assumed to manage pollutants

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Other (please specify)

All projects treated equally. Most regulated projects must retain volume from 1.2" storm event

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections
MS4	Routine Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
 Projects in the District of Columbia do not use stormwater ponds

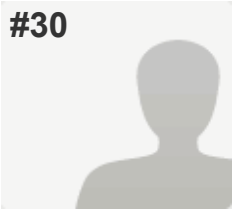
**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

*Respondent skipped this question*

**PAGE 5: Contact information****Q11: Contact Information**

Name	Jeff Seltzer
Agency	Department of Energy and Environment
State/Province	DC
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Phone Number	202-535-1603

#30



Chesterfield County, Virginia

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Virginia Stormwater BMP Clearinghouse
Other Guidance Document (Please provide the name)	Virginia Stormwater Management Program Regulations

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Constituents of Potential Concern
Nitrogen	Primarily Regulated Pollutants
Other (please specify) heavy metals	

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Phosphorus	% Reduction or removal of influent pollutant
Nitrogen	% Reduction or removal of influent pollutant

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Phosphorus	Varies between 20% and 65%
------------	----------------------------

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type,
Other (please specify) forested/open space, impervious and turf acres

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections
MS4	Routine Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

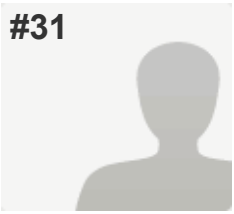
**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:***Respondent skipped this question***Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?***Respondent skipped this question***PAGE 5: Contact information****Q11: Contact Information**

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#31



Richmond, Virginia

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Virginia Tech BMP Clearinghouse web site

Permit (Please provide the name)

VPDES under the VSMP program

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids

Constituents of Potential Concern

Phosphorus

Primarily Regulated Pollutants

Nitrogen

Constituents of Potential Concern

Other (please specify)

Flow volumes

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Phosphorus

% Reduction or removal of influent pollutant

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

*Respondent skipped this question*

## PAGE 4: Operation



**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Self reporting through permit requirements
MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections, Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

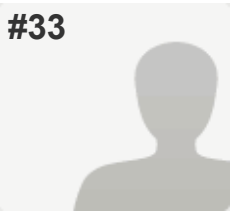
Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:***Respondent skipped this question***Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?***Respondent skipped this question***PAGE 5: Contact information****Q11: Contact Information***Respondent skipped this question*

#33



Makawao, Hawaii

PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	State of Hawaii Department of Transportation, Highways Division, Storm Water Permanent Best Management Practices Manual, April 2015
Permit (Please provide the name)	Authorization To Discharge Under The National Pollutant Discharge Elimination System, Permit No. HIS000001
Data Bases (e.g. International Database, TAPE, NJCAT)	none
Other Guidance Document (Please provide the name)	none
Consultants	none
Other (Please identify or explain)	none
None (Please explain)	not applicable

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Dissolved Lead	Primarily Regulated Pollutants
Dissolve Cadmium	Primarily Regulated Pollutants
Dissolved Chromium	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Trash	Constituents of Potential Concern
Other (please specify) oxygen saturation, temperature, salinity, BTEX, flow	

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**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant, Permit Conditions
Turbidity	Permit Conditions
Dissolved lead	Permit Conditions
Dissolved cadmium	Permit Conditions
Dissolved chromium	Permit Conditions
Phosphorus	% Reduction or removal of influent pollutant, Permit Conditions
Oil / Grease	Permit Conditions
Nitrogen	% Reduction or removal of influent pollutant, Permit Conditions
Nitrates	Permit Conditions
Nitrites	Permit Conditions
Ammonia	Permit Conditions
pH	Permit Conditions
BOD / COD	Permit Conditions
Trash	% Reduction or removal of influent pollutant

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	varies by baseyard and watershed
Turbidity	varies by baseyard
Dissolved lead	29 ug/L
Dissolved cadmium	3 ug/L
Dissolved chromium	16 ug/L
Phosphorus	varies by baseyard and watershed
Oil / Grease	15 mg/L
Nitrogen	varies by baseyard and watershed
Nitrates	varies by baseyard
Nitrites	varies by baseyard
Ammonia	varies by baseyard
pH	5.5-8.0
Trash	50% reduction by 2023 and 100% reduction by 2036

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,  
Long dry periods, Saturated media,  
Pollutant concentration, Land use,  
Space restrictions, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections
MS4	Routine Agency inspections, Event dependent Agency inspections
Construction	Routine Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

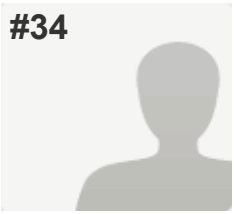
Other (please explain)  
There are no ponds in our MS4

**PAGE 5: Contact information**

**Q11: Contact Information**

Name	Kelly Lee Sato
Agency	State of Hawaii Department of Transportation Highways Division Oahu District
State/Province	HI
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#34



Shoreline, Washington

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Stormwater Management Manual Western WA; Stormwater Management Manual Eastern WA; WAWSDOT Highway Runoff Manual:
Permit (Please provide the name)	Phase I Municipal Stormwater Permit: Western WA Phase II Municipal Stormwater Permit: Eastern WA Phase II Municipal Stormwater Permit: WSDOT Municipal Stormwater Permit
Data Bases (e.g. International Database, TAPE, NJCAT)	Chemical Technology Assessment Protocol – Ecology (C-TAPE); Technology Assessment Protocol – Ecology (TAPE); PARIS (Permit and Recording Information System) : Water Quality Permit Portal
Other Guidance Document (Please provide the name)	Low Impact Development Technical Guidance Manual for Puget Sound (December, 2012): Eastern Washington Low Impact Development Guidance Manual: Rain Garden Handbook for Western Washington (June, 2013) WSU Extension and Kitsap County:
Consultants	Board of External Reviewers (BER), Stakeholder Advisory Group (SAG)

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Total copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Total Lead	Primarily Regulated Pollutants
Total Cadmium	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Ortho-phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Other (please specify) NWTPH (diesel), Sediment	

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**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction**

**Stormwater BMP?**

Turbidity	Concentration limit of the effluent
Total copper	Concentration limit of the effluent
Total zinc	Concentration limit of the effluent
Total lead	Concentration limit of the effluent
Total cadmium	Concentration limit of the effluent
Total chromium	Concentration limit of the effluent
Phosphorus	Concentration limit of the effluent
Ortho-phosphorus	Concentration limit of the effluent
Nitrogen	Concentration limit of the effluent
Nitrates	Concentration limit of the effluent
Nitrites	Concentration limit of the effluent
Ammonia	Concentration limit of the effluent
pH	Concentration limit of the effluent
Bacteria / Pathogens	Concentration limit of the effluent
PCBs	Concentration limit of the effluent
PAHs	Concentration limit of the effluent
BOD / COD	Concentration limit of the effluent

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Turbidity	25 NTU
Total copper	Eastern WA 32: ug/l Western WA: 14 ug/l
Total Zinc	117 ug/l
Oil / Grease	Sheen (yes/no)
pH	6.5 - 8.5 SU

**PAGE 3: Stormwater Site Characteristics**

<b>Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.</b>	Vegetation, Other (please specify) Erosion/sediment control BMPs
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**PAGE 4: Operation**



**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Self reporting through permit requirements
MS4	Self reporting through permit requirements, Digital recording devices
Construction	Routine Agency inspections, Self reporting through permit requirements
Other types of monitoring (please specify)	The exception for MS4 monitoring would be for 303(d) parameters listed in a TMDL.

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

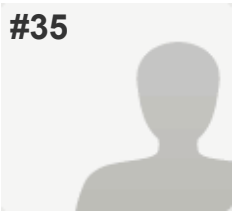
Yes

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain) Unknown

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**Soil screening values,  
Other (please explain) unknown**PAGE 5: Contact information****Q11: Contact Information***Respondent skipped this question*

#35



Albuquerque, New Mexico

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	The City of Albuquerque's Development Process Manual, Engineering Judgment
Permit (Please provide the name)	NMR04A000
None (Please explain)	We use our own staff for Post Construction

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Total Dissolved Solids	Constituents of Potential Concern
Radionuclides	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Nitrates	Constituents of Potential Concern
Nitrites	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	None of These
Total Dissolved Solids	None of These
Radionuclides	None of These
Oil / Grease	None of These
Nitrogen	None of These
Nitrates	None of These
Nitrites	None of These
Ammonia	None of These
pH	None of These
Bacteria / Pathogens	None of These
PCBs	None of These
PAHs	None of These
Pesticides	None of These
Herbicides	None of These
BOD / COD	None of These
Trash	None of These

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Long dry periods, Land use, Space restrictions

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Event dependent Agency inspections
MS4	Routine Agency inspections, Event dependent Agency inspections
Construction	Routine Agency inspections, Event dependent Agency inspections
Other types of monitoring (please specify)	in the Rio Grande

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

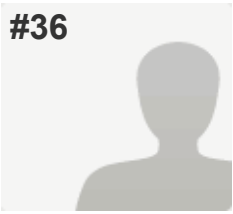
**Q9: Is your State Agency or Municipality addressing:***Respondent skipped this question***Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Olfactory or visual observation

**PAGE 5: Contact information****Q11: Contact Information**

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#36



Santa Fe, New Mexico

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Other (Please identify or explain)

Permit regulations specific to the site and site conditions

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Total Dissolved Solids	Primarily Regulated Pollutants
Total copper	Primarily Regulated Pollutants
Dissolved Copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Dissolved Zinc	Primarily Regulated Pollutants
Total Lead	Primarily Regulated Pollutants
Dissolved Lead	Primarily Regulated Pollutants
Total Cadmium	Primarily Regulated Pollutants
Dissolve Cadmium	Constituents of Potential Concern
Total Chromium	Constituents of Potential Concern
Dissolved Chromium	Primarily Regulated Pollutants
Total Nickel	Primarily Regulated Pollutants
Dissolved Nickel	Primarily Regulated Pollutants
Total Arsenic	Constituents of Potential Concern
Dissolved Arsenic	Constituents of Potential Concern
Radionuclides	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants

Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Constituents of Potential Concern
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Primarily Regulated Pollutants
Trash	Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Concentration limit of the effluent, Permit Conditions
Suspended Solid Concentration	Concentration limit of the effluent, Permit Conditions
Turbidity	Concentration limit of the effluent
Total Dissolved Solids	Concentration limit of the effluent
Total copper	Concentration limit of the effluent, Permit Conditions
Dissolved copper	Concentration limit of the effluent, Permit Conditions
Total zinc	Concentration limit of the effluent
Dissolved zinc	Concentration limit of the effluent
Total lead	Concentration limit of the effluent, Permit Conditions
Dissolved lead	Concentration limit of the effluent, Permit Conditions
Total cadmium	Concentration limit of the effluent, Permit Conditions
Dissolved cadmium	Concentration limit of the effluent, Permit Conditions
Total chromium	Concentration limit of the effluent, Permit Conditions

Dissolved chromium	Concentration limit of the effluent, Permit Conditions
Total nickel	Concentration limit of the effluent, Permit Conditions
Dissolved nickel	Concentration limit of the effluent, Permit Conditions
Total arsenic	Concentration limit of the effluent, Permit Conditions
Dissolved arsenic	Concentration limit of the effluent, Permit Conditions
Radionuclides	Concentration limit of the effluent
Phosphorus	Concentration limit of the effluent
Ortho-phosphorus	Concentration limit of the effluent
Oil / Grease	Concentration limit of the effluent
Nitrogen	Concentration limit of the effluent, Permit Conditions
Nitrates	Concentration limit of the effluent, Permit Conditions
Nitrites	Concentration limit of the effluent, Permit Conditions
Ammonia	Concentration limit of the effluent, Permit Conditions
pH	Concentration limit of the effluent
Bacteria / Pathogens	None of These
PCBs	Concentration limit of the effluent, Permit Conditions
PAHs	Concentration limit of the effluent
Pesticides	Concentration limit of the effluent
Herbicides	Concentration limit of the effluent
BOD / COD	Concentration limit of the effluent
Trash	None of These
Other methods not listed (please explain)	HE or UXO

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**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	Nope -not off the top of my head.
Suspended Solid Concentration	Nope -not off the top of my head.
Turbidity	Nope -not off the top of my head.
Total Dissolved Solids	Nope -not off the top of my head.
Total copper	5 ppm
Dissolved copper	Nope -not off the top of my head.
Total Zinz	Nope -not off the top of my head.
Dissolved zinc	Nope -not off the top of my head.
Total lead	Nope -not off the top of my head.
Dissolved lead	Nope -not off the top of my head.
Total cadmium	Nope -not off the top of my head.
Dissolved cadmium	Nope -not off the top of my head.
Total chromium	Nope -not off the top of my head.
Dissolved chromium	Nope -not off the top of my head.
Total nickel	Nope -not off the top of my head.
Dissolved nickel	Nope -not off the top of my head.
Total arsenic	5 ppm
Dissolved arsenic	Nope -not off the top of my head.
Radionuclides	Nope -not off the top of my head.
Phosphorus	Nope -not off the top of my head.
Ortho-phosphorus	Nope -not off the top of my head.
Oil / Grease	Nope -not off the top of my head.
Nitrogen	Nope -not off the top of my head.
Nitrates	Nope -not off the top of my head.
Nitrites	Nope -not off the top of my head.
Ammonia	Nope -not off the top of my head.
pH	6.5-8
Bacteria / Pathogens	Not related to my work
PCBs	Nope -not off the top of my head.
PAHs	Nope -not off the top of my head.
Pesticides	Nope -not off the top of my head.
Herbicides	Nope -not off the top of my head.
BOD / COD	Nope -not off the top of my head.
Trash	Not related to my work



**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Temperature,  
Long dry periods, Saturated media,  
Pollutant concentration, Land use,  
Space restrictions, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Self reporting through permit requirements
MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Don't know
Construction Stormwater	Don't know
Other (please specify) Industrial requirements are site and contaminate specific	

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance  
,  
Economic impacts from BMP sediment disposal management

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

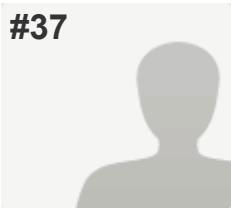
Known area of gross contamination ,  
Soil screening values, Generator knowledge

**PAGE 5: Contact information**

**Q11: Contact Information**

*Respondent skipped this question*

#37



Show Low, Arizona

PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Permit (Please provide the name)	Middle Rio Grande MS4 Permit
Other Guidance Document (Please provide the name)	Development Process Manual
Consultants	Various

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Permit Conditions
Bacteria / Pathogens	Permit Conditions
PCBs	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Topography, Pollutant concentration

PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	None Required
MS4	Routine Agency inspections, Event dependent Agency inspections, Effluent monitoring
Construction	Routine Agency inspections, Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

,

Economic impacts from BMP sediment disposal management

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

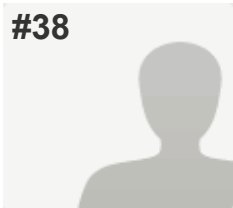
Soil screening values

**PAGE 5: Contact information****Q11: Contact Information**

Name	David Gatterman
Agency	SSCAFCA
State/Province	NM
Email Address	dgatterman@sscafca.com
Phone Number	5058927246

#38

Richmond, Virginia



## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Virginia Stormwater Manual

Other Guidance Document (Please provide the name)

Virginia BMP Specifications

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Phosphorus

Primarily Regulated Pollutants

Other (please specify)  
Stormwater Volume

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Phosphorus

Concentration limit of the effluent

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Phosphorus

0.41 lbs/arce/year

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Land use

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Construction

Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Construction Stormwater	Yes
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**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

	No
--	----

---

**Q9: Is your State Agency or Municipality addressing:**

	Other (please explain) none
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**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

	<i>Respondent skipped this question</i>
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**PAGE 5: Contact information**

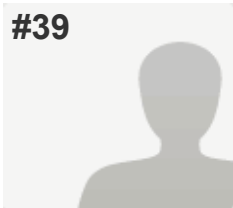
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**Q11: Contact Information**

Name	Robert Cooper
Agency	DEQ
State/Province	VA
Email Address	Robert.Cooper@deq.virginia.gov

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#39



Wilmington, Delaware

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Delaware Post Construction Stormwater BMP Standards & Specifications
Permit (Please provide the name)	Delaware Sediment & Stormwater Plan
Data Bases (e.g. International Database, TAPE, NJCAT)	ASCE International BMP database

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Mass loading for TMDL compliance
Phosphorus	Mass loading for TMDL compliance
Nitrogen	Mass loading for TMDL compliance

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	Required reduction varies by watershed
Phosphorus	Required reduction varies by watershed
Nitrogen	Required reduction varies by watershed

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Receiving waters

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**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Effluent monitoring
MS4	Routine Agency inspections
Construction	Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Other (please explain)  
Generally landfillable unless from known hotspot

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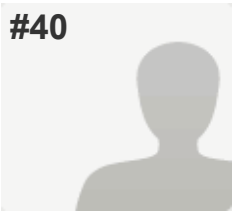
**PAGE 5: Contact information**

**Q11: Contact Information**

Name	Randell Greer
Agency	Delawre DNREC
State/Province	Delaware
Email Address	randell.greer@state.de.us
Phone Number	302-739-9921

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#40



Lincoln, Nebraska

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PAGE 2: Pollutants of Concern

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**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	MS4 Program Evaluation Guidance
Permit (Please provide the name)	MS4
Data Bases (e.g. International Database, TAPE, NJCAT)	None
Other Guidance Document (Please provide the name)	None
Consultants	None
Other (Please identify or explain)	None

---



**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Constituents of Potential Concern
Turbidity	Constituents of Potential Concern
Total copper	Constituents of Potential Concern
Total Zinc	Constituents of Potential Concern
Total Lead	Constituents of Potential Concern
Total Cadmium	Constituents of Potential Concern
Total Chromium	Constituents of Potential Concern
Total Nickel	Constituents of Potential Concern
Total Arsenic	Constituents of Potential Concern
Phosphorus	Constituents of Potential Concern
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Constituents of Potential Concern
Nitrogen	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
pH	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
PCBs	Constituents of Potential Concern
PAHs	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
Trash	Constituents of Potential Concern

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**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Permit Conditions
Turbidity	Permit Conditions
Total copper	Permit Conditions
Total zinc	Permit Conditions
Total lead	Permit Conditions
Total cadmium	Permit Conditions
Total chromium	Permit Conditions
Total nickel	Permit Conditions
Total arsenic	Permit Conditions
Phosphorus	Permit Conditions
Ortho-phosphorus	Permit Conditions
Oil / Grease	Permit Conditions
Nitrogen	Permit Conditions
Ammonia	Permit Conditions
PCBs	Permit Conditions
PAHs	Permit Conditions
Pesticides	Permit Conditions
Herbicides	Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Land use, Space restrictions, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Event dependent Agency inspections
MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections, Event dependent Agency inspections

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

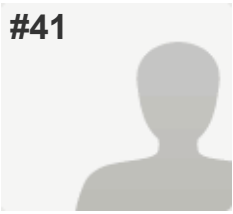
Other (please explain) TCLP Analysis

**PAGE 5: Contact information**

**Q11: Contact Information**

*Respondent skipped this question*

#41



Bismarck, North Dakota

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PAGE 2: Pollutants of Concern

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**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	none
Permit (Please provide the name)	NDR10-0000
Data Bases (e.g. International Database, TAPE, NJCAT)	None
Other Guidance Document (Please provide the name)	CFR40
Consultants	None
None (Please explain)	I am a regulator

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**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Total Dissolved Solids	Primarily Regulated Pollutants
Total copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Total Lead	Primarily Regulated Pollutants
Total Cadmium	Primarily Regulated Pollutants
Total Chromium	Primarily Regulated Pollutants
Total Nickel	Primarily Regulated Pollutants
Total Arsenic	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Primarily Regulated Pollutants
Pesticides	Primarily Regulated Pollutants
Herbicides	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Trash	Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Permit Conditions
Suspended Solid Concentration	Permit Conditions
Turbidity	Permit Conditions
Total Dissolved Solids	Permit Conditions
Total copper	Permit Conditions

Dissolved copper	Permit Conditions
Total zinc	Permit Conditions
Dissolved zinc	Permit Conditions
Total lead	Permit Conditions
Dissolved lead	Permit Conditions
Total cadmium	Permit Conditions
Dissolved cadmium	Permit Conditions
Total chromium	Permit Conditions
Dissolved chromium	Permit Conditions
Total nickel	Permit Conditions
Dissolved nickel	Permit Conditions
Total arsenic	Permit Conditions
Dissolved arsenic	Permit Conditions
Radionuclides	Permit Conditions
Phosphorus	Permit Conditions
Ortho-phosphorus	Permit Conditions
Oil / Grease	Permit Conditions
Nitrogen	Permit Conditions
Nitrates	Permit Conditions
Nitrites	Permit Conditions
Ammonia	Permit Conditions
pH	Permit Conditions
Bacteria / Pathogens	Permit Conditions
PCBs	Permit Conditions
PAHs	Permit Conditions
Pesticides	Permit Conditions
Herbicides	Permit Conditions
BOD / COD	Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Effluent monitoring, Self reporting through permit requirements
MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

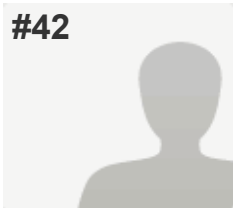
Known area of gross contamination ,  
Olfactory or visual observation ,  
Characteristics of the watershed

**PAGE 5: Contact information**

**Q11: Contact Information**

Name	Patricia Winn
Agency	ND DOH WQ
State/Province	North Dakota
Email Address	pwinn@nd.gov
Phone Number	701-328-5239

#42



Cheyenne, Wyoming

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

We have used a manual developed by the State of North Dakota

Permit (Please provide the name)

The appropriate construction storm water general permit

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids

Primarily Regulated Pollutants

Total copper

Primarily Regulated Pollutants

Total Zinc

Primarily Regulated Pollutants

Total Lead

Primarily Regulated Pollutants

Total Arsenic

Primarily Regulated Pollutants

Oil / Grease

Primarily Regulated Pollutants

Nitrates

Primarily Regulated Pollutants

Nitrites

Primarily Regulated Pollutants

pH

Primarily Regulated Pollutants

BOD / COD

Primarily Regulated Pollutants

Other (please specify)

Total Aluminum, and Total Iron,



**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Permit Conditions
Total copper	Permit Conditions
Total zinc	Permit Conditions
Total lead	Permit Conditions
Total arsenic	Permit Conditions
Oil / Grease	Permit Conditions
Nitrates	Permit Conditions
Nitrites	Permit Conditions
pH	Permit Conditions
BOD / COD	Permit Conditions
Other methods not listed (please explain)	Total Aluminum and Total Iron; Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	50 mg/L Daily Max, or 100 mg/L Benchmark depending on SIC Code
Total copper	0.0636 mg/L (Benchmark)
Total Zinz	0.117 mg/L (Benchmark)
Total lead	0.0816 mg/L (Benchmark)
Total arsenic	0.16854 mg/L (Benchmark)
Oil / Grease	10 mg/L (Daily Max) and (30 Day Average)
Nitrates	Nitrate + Nitrite Nitrogen 0.68 mg/L (Benchmark)
Nitrites	Nitrate + Nitrite Nitrogen 0.68 mg/L (Benchmark)
pH	Between 6.5 su and 9.0 su (Daily Max)
BOD / COD	COD/ 120 mg/L (Benchmark)

**PAGE 3: Stormwater Site Characteristics****Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography, Temperature,  
Long dry periods, Land use, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Effluent monitoring, Self reporting through permit requirements, Digital recording devices
MS4	Routine Agency inspections, Self reporting through permit requirements, Digital recording devices
Construction	Routine Agency inspections, Event dependent Agency inspections, Self reporting through permit requirements, Digital recording devices
Other types of monitoring (please specify)	Complaints

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	Don't know
Construction Stormwater	Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**Other (please explain)  
Not sure (Management Question)**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

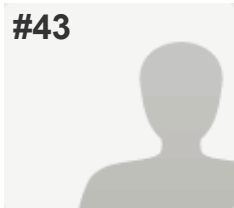
Other (please explain) Not Sure

**PAGE 5: Contact information****Q11: Contact Information**

Name	James Eisenhauer
Agency	Wyoming Department of Environmental Quality
State/Province	Wyoming
Email Address	jim.eisenhauer@wyo.gov
Phone Number	307-675-5636

#43

Cambridge, Massachusetts



## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Multiple state, federal and academic resources
Permit (Please provide the name)	MS4, Alteration of terrain, EPA Region 1 regs
Data Bases (e.g. International Database, TAPE, NJCAT)	WEF
Other Guidance Document (Please provide the name)	UNH Stormwater Center

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Primarily Regulated Pollutants
Total copper	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Constituents of Potential Concern
Bacteria / Pathogens	Primarily Regulated Pollutants
PAHs	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	% Reduction or removal of influent pollutant
Phosphorus	% Reduction or removal of influent pollutant
Nitrogen	% Reduction or removal of influent pollutant
Nitrites	None of These
PAHs	Concentration limit of the effluent

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	90
Phosphorus	60
Nitrogen	60

---

### PAGE 3: Stormwater Site Characteristics

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**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Topography, Pollutant concentration,  
Land use, Receiving waters

---

### PAGE 4: Operation

---

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Self reporting through permit requirements
MS4	Self reporting through permit requirements
Construction	Self reporting through permit requirements

---

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

---

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

---

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

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**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Other (please explain) no requirements

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### PAGE 5: Contact information

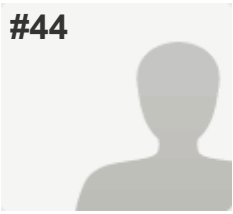
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**Q11: Contact Information**

Name	James Houle
Agency	UNH
State/Province	NEW HAMPSHIRE
Email Address	james.houle@unh.edu
Phone Number	6038621445

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#44



Little Rock, Arkansas

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Consultants	the Design consultant
Other (Please identify or explain)	local ordinance if applicable

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Total copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Total Lead	Constituents of Potential Concern
Total Cadmium	Constituents of Potential Concern
Total Arsenic	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants
Ortho-phosphorus	Constituents of Potential Concern
Oil / Grease	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Trash	Primarily Regulated Pollutants
Other (please specify)	
iron, aluminum, fluorides, beryllium, mercury, antimony, selenium, silver,	

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	Mass loading for TMDL compliance, Permit Conditions
Turbidity	Concentration limit of the effluent, Mass loading for TMDL compliance
Total copper	Mass loading for TMDL compliance, Permit Conditions
Total zinc	Mass loading for TMDL compliance, Permit Conditions
Total lead	Mass loading for TMDL compliance, Permit Conditions
Total cadmium	Mass loading for TMDL compliance, Permit Conditions
Total arsenic	Mass loading for TMDL compliance, Permit Conditions
Phosphorus	Mass loading for TMDL compliance, Permit Conditions
Ortho-phosphorus	Mass loading for TMDL compliance, Permit Conditions
Oil / Grease	Mass loading for TMDL compliance, Permit Conditions
Nitrogen	Mass loading for TMDL compliance, Permit Conditions
Nitrates	Mass loading for TMDL compliance, Permit Conditions
pH	Permit Conditions
BOD / COD	Mass loading for TMDL compliance, Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	For all listed above, comparison to “benchmark” standards deemed appropriate depending on what facility sector they fall into
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**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Receiving waters

**PAGE 4: Operation****Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Effluent monitoring, Self reporting through permit requirements
MS4	Routine Agency inspections, None Required
Construction	Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	Yes
MS4	No
Construction Stormwater	Yes
Other (please specify) effluent monitoring is used to measure BMP compliance	

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

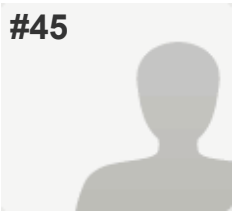
Known area of gross contamination ,  
Generator knowledge,  
Other (please explain)  
If not suspected to be contaminated the sediment clean-out may be re-used onsite. If contaminated, sample according to requirements of receiving landfill.

**PAGE 5: Contact information****Q11: Contact Information**

Name	Bryan Leamons, P.E.
Agency	Arkansas Department of Environmental Quality
State/Province	Arkansas
Email Address	leamons@adeq.state.ar.us
Phone Number	501-683-5405



#45



Marana, Arizona

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	Arizona Department of Transportation Stormwater BMP Manual
Permit (Please provide the name)	Arizona Department of Environmental Quality Construction General Permit
Other Guidance Document (Please provide the name)	Title 25 of the Town of Marana Land Development Code

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Turbidity	Constituents of Potential Concern
Total copper	Primarily Regulated Pollutants
Oil / Grease	Constituents of Potential Concern
Ammonia	Constituents of Potential Concern
Bacteria / Pathogens	Constituents of Potential Concern
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
Trash	Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Turbidity	Permit Conditions
Dissolved copper	Permit Conditions
Oil / Grease	Permit Conditions
Ammonia	Permit Conditions
Bacteria / Pathogens	Permit Conditions
Pesticides	Permit Conditions
Herbicides	Permit Conditions
Trash	Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Topography, Land use, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Self reporting through permit requirements
MS4	Routine Agency inspections
Construction	Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

*Respondent skipped this question*

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**PAGE 5: Contact information**

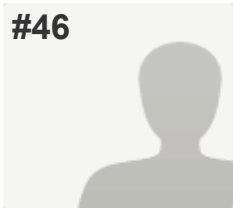
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**Q11: Contact Information**

Name	Paula Bluemer
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#46



Tuscon, Arizona

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	2016 ADOT Post Construction BMP Manual for Water Quality
Permit (Please provide the name)	AZPDES Permit No AZS000002
Other (Please identify or explain)	2015 Low Impact Development and Green Infrastructure Guidance Manual

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Dissolved Copper	Primarily Regulated Pollutants
pH	Constituents of Potential Concern
Bacteria / Pathogens	Primarily Regulated Pollutants
Other (please specify) Dissolved Silver as a potential concern	

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Dissolved copper	None of These
pH	None of These
Bacteria / Pathogens	None of These
Other methods not listed (please explain)	Approach is driven by cause of the pollutant and impact of pollutant on health and environment. GI features are excellent for reducing the pathogens & metals. These features are voluntary rather than required. Public education is also provided for E. coli as use of installed Doggie Waste Stations is the issue, rather than installation of the station. Health and environmental issues associated with copper and pathogens have not been documented within the Pima County MS4 permit area.

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Dissolved copper	NA
pH	NA
Bacteria / Pathogens	NA

### PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,  
Saturated media, Receiving waters

### PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

MS4	Routine Agency inspections
Other types of monitoring (please specify)	Once after construction is complete.

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

*Respondent skipped this question*

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
Research has not documented typical impacts from measured concentrations of pollutants.

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

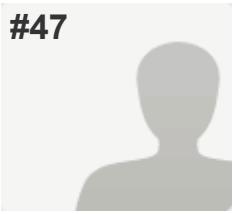
Soil screening values

### PAGE 5: Contact information

**Q11: Contact Information**

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#47



Concord, New Hampshire

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

NH Stormwater Manual -  
<http://www.des.nh.gov/organization/divisions/water/stormwater/manual.htm>

Permit (Please provide the name)

NH Small MS4 General Permit -  
[https://www3.epa.gov/region1/npdes/stormwater/MS4\\_NH.html](https://www3.epa.gov/region1/npdes/stormwater/MS4_NH.html) NH Alteration of Terrain (AoT) Permit -  
<http://www.des.nh.gov/organization/divisions/water/aot/index.htm>

Data Bases (e.g. International Database, TAPE, NJCAT)

University of NH Stormwater Center -  
<http://www.unh.edu/unhsc/>

Other Guidance Document (Please provide the name)

NH Alteration of Terrain BMP Worksheet -  
[http://www.des.nh.gov/organization/divisions/water/aot/documents/bmp\\_worksh.xls](http://www.des.nh.gov/organization/divisions/water/aot/documents/bmp_worksh.xls)

Consultants

Principal Consultant on NH Stormwater Manual (2008) - <http://ceiengineers.com/>

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Total copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Total Lead	Primarily Regulated Pollutants
Total Cadmium	Primarily Regulated Pollutants
Dissolved Chromium	Primarily Regulated Pollutants
Total Nickel	Primarily Regulated Pollutants
Total Arsenic	Primarily Regulated Pollutants
Radionuclides	Primarily Regulated Pollutants
Phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
PAHs	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Trash	Primarily Regulated Pollutants

Other (please specify)

Surface Water Quality Standards – Env-Wq 1700

<http://www.des.nh.gov/organization/commissioner/legal/rulemaking/documents/env-wq1700rwa-adptpst.pdf> Also regulated are Dissolved oxygen, Benthic deposits and Color

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids	None of These
Suspended Solid Concentration	None of These
Turbidity	None of These
Total Dissolved Solids	None of These

Total copper	None of These
Dissolved copper	None of These
Total zinc	None of These
Dissolved zinc	None of These
Total lead	None of These
Dissolved lead	None of These
Total cadmium	None of These
Dissolved cadmium	None of These
Total chromium	None of These
Dissolved chromium	None of These
Total nickel	None of These
Dissolved nickel	None of These
Total arsenic	None of These
Dissolved arsenic	None of These
Radionuclides	None of These
Phosphorus	None of These
Ortho-phosphorus	None of These
Oil / Grease	None of These
Nitrogen	None of These
Nitrates	None of These
Nitrites	None of These
Ammonia	None of These
pH	None of These
Bacteria / Pathogens	None of These
PCBs	None of These
PAHs	None of These
Pesticides	None of These
Herbicides	None of These
BOD / COD	None of These
Trash	None of These



Other methods not listed (please explain)

3. Depending on applicability of regulatory program (based on size and location of construction project) a State of NH Alteration of Terrain (AoT) permit may be required. NHDES reviews the BMP selection and performance as presented in an AoT permit application. Performance assessment is based on "Water Quality Volume" – see BMP Worksheet referenced earlier.

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids

4. Discharge limits for specific pollutants are based on receiving water's designated use and assimilative capacity (TMDL). See Env-Wq 1703.03 referenced earlier.

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Other (please specify)

5. Except for development projects where a NH State permit is required, NHDES does not review BMP selection to fit site characteristics. Project engineers propose BMPs and apply for approval by municipal staff and volunteer Planning Boards in cities and towns that have adopted local stormwater regulations.

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Construction

Self reporting through permit requirements

Other types of monitoring (please specify)

6. Industrial and MS4 fall under Federal jurisdiction. NH is not delegated authority under NPDES program, although NHDES does certify certain facilities under an NPDES General Permit.

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial

No

MS4

No

Construction Stormwater

Don't know

Other (please specify)  
7. See response to 6 above.

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Don't Know

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain) 9. Don't know

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

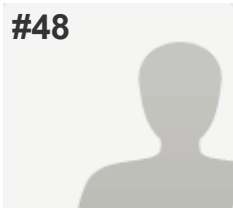
Other (please explain)  
10. BMP sediment management and disposal appears to fall under an exemption as water treatment sludge as defined by NH Solid Waste Management Rule Env-Sw-101.03(g), except if disposed in a permitted facility.

**PAGE 5: Contact information**

**Q11: Contact Information**

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#48



Nashville, Tennessee

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Tennessee Permanent Stormwater Management and Design Guidance Manual

Permit (Please provide the name)

Tennessee NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems

Other (Please identify or explain)

Tennessee Runoff Reduction Assessment Tool

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids

Primarily Regulated Pollutants

Other (please specify)

Nutrients and Pathogens (TSS as surrogate)

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Total Suspended Solids

% Reduction or removal of influent pollutant

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids

100% removal with practices that infiltrate/evapotranspire/capture where site conditions allow, and at least 80% removal if site limitations exist

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Receiving waters, Space restrictions, Land use, Pollutant concentration, Topography, Vegetation, Soil type, Other (please specify) existing built-site limitations

**PAGE 4: Operation****Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

MS4	Routine Agency inspections, Self reporting through permit requirements
Other types of monitoring (please specify)	It is the MS4s responsibility to ensure practices with their jurisdiction are installed, implemented and maintained to meet the performance standards

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

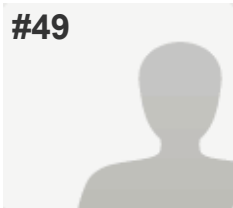
**Q9: Is your State Agency or Municipality addressing:**

BMP sediment disposal management strategies and guidance

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**Other (please explain)  
Generally characterized as special waste and disposed in Class 1 landfills**PAGE 5: Contact information****Q11: Contact Information**

Name	Robert Karesh
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#49



Tempe, Arizona

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)

Maricopa County Policies and Standards

Permit (Please provide the name)

Permit AZG2013-001

Other Guidance Document (Please provide the name)

City of Tempe Ordinance

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Turbidity

Constituents of Potential Concern

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Turbidity

Permit Conditions

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Turbidity

No OAW or Impaired Streams in municipal boundaries

## PAGE 3: Stormwater Site Characteristics

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Vegetation, Topography,

Long dry periods, Land use, Receiving waters

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Routine Agency inspections, Self reporting through permit requirements
MS4	Routine Agency inspections, Self reporting through permit requirements
Construction	Routine Agency inspections, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	No
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

Yes

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain)  
Neither the municipality or state are actively developing

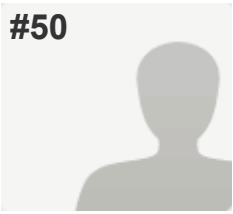
**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

Generator knowledge

**PAGE 5: Contact information****Q11: Contact Information**

*Respondent skipped this question*

#50



Austin, Texas

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	None
Permit (Please provide the name)	TPDES individual Phase I MS4 permits, the TPDES Phase II (Small) General Permit TXR040000, and Stormwater Management Programs (SWMPs) under these permits.
Data Bases (e.g. International Database, TAPE, NJCAT)	None
Other Guidance Document (Please provide the name)	Program checklists and SOPs
Consultants	None
Other (Please identify or explain)	None
None (Please explain)	None

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e.g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Turbidity	Primarily Regulated Pollutants
Total copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Dissolved Zinc	Primarily Regulated Pollutants
Total Lead	Primarily Regulated Pollutants
Dissolved Lead	Primarily Regulated Pollutants
Total Cadmium	Primarily Regulated Pollutants
Dissolve Cadmium	Primarily Regulated Pollutants
Total Chromium	Primarily Regulated Pollutants
Total Nickel	Primarily Regulated Pollutants
Total Arsenic	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Primarily Regulated Pollutants
Bacteria / Pathogens	Primarily Regulated Pollutants
PCBs	Primarily Regulated Pollutants
BOD / COD	Primarily Regulated Pollutants
Other (please specify)	
Total Silver, Mercury, Selenium, Cyanide, Aluminum, Antimony, Beryllium	

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**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

Other methods not listed (please explain)

All MS4 permits include requirements that MS4 operators must have a post-construction stormwater management program that includes operation and maintenance of structural and non-structural controls. The MS4s are required to develop a SWMP under their permits that includes details about how the operation and maintenance of controls are performed. TCEQ reviews and approves SWMPs. In addition the MS4s submits annual reports about the status of each program under the SMWP including maintenance of post construction stormwater controls.

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**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

Total Suspended Solids	None
Suspended Solid Concentration	None
Turbidity	None
Total Dissolved Solids	None
Total copper	2.0 mg/L
Dissolved copper	None
Total Zinz	6.0 mg/L
Dissolved zinc	None
Total lead	1.5 mg/L
Dissolved lead	None
Total cadmium	0.2 mg/L
Dissolved cadmium	None
Total chromium	5.0 mg/L
Dissolved chromium	None
Total nickel	3.0 mg/L
Dissolved nickel	None
Total arsenic	0.3 mg/L
Dissolved arsenic	None
Radionuclides	None
Phosphorus	None
Ortho-phosphorus	None
Oil / Grease	15 mg/L
Nitrogen	None
Nitrates	None
Nitrites	None
Ammonia	None
pH	6.0-9.0 SU
Bacteria / Pathogens	None
PCBs	None
PAHs	None
Pesticides	None
Herbicides	None
BOD / COD	150-200
Trash	None

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Other (please specify)  
Requirements of Phase I and II MS4 permits

## PAGE 4: Operation

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

Industrial	Self reporting through permit requirements
MS4	Self reporting through permit requirements
Construction	Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

Industrial	No
MS4	Yes
Construction Stormwater	No

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

No

**Q9: Is your State Agency or Municipality addressing:**

Other (please explain) No

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

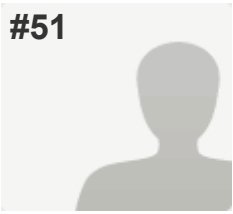
Other (please explain) Do not know

## PAGE 5: Contact information

**Q11: Contact Information**

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#51



Billings, Montana

## PAGE 2: Pollutants of Concern

**Q1: When you evaluate or oversee the selection of post construction treatment BMPs, what resources do you use?**

Manual (Please provide the name)	City of Billings Stormwater Management Manual
Data Bases (e.g. International Database, TAPE, NJCAT)	NJCAT
Consultants	DOWL, HDR

**Q2: Which pollutants / constituents listed below are considered by your agency for Stormwater Control. Please add any not already listed in the "other" box at the end of the question. "Primarily Regulated Pollutants" are those pollutants that are required to be within regulatory limits established by statute or regulation to protect human health and the environment. Question # 3 asks for clarification of any regulatory limits. (e,g, % reduction, concentration, mass loading, etc)**

Total Suspended Solids	Primarily Regulated Pollutants
Suspended Solid Concentration	Constituents of Potential Concern
Turbidity	Primarily Regulated Pollutants
Total Dissolved Solids	Primarily Regulated Pollutants
Total copper	Primarily Regulated Pollutants
Dissolved Copper	Primarily Regulated Pollutants
Total Zinc	Primarily Regulated Pollutants
Dissolved Zinc	Primarily Regulated Pollutants
Total Lead	Primarily Regulated Pollutants
Dissolved Lead	Primarily Regulated Pollutants
Total Cadmium	Primarily Regulated Pollutants
Dissolve Cadmium	Primarily Regulated Pollutants
Total Chromium	Primarily Regulated Pollutants
Dissolved Chromium	Primarily Regulated Pollutants
Total Nickel	Primarily Regulated Pollutants
Dissolved Nickel	Primarily Regulated Pollutants
Total Arsenic	Primarily Regulated Pollutants
Dissolved Arsenic	Primarily Regulated Pollutants

Radionuclides	Constituents of Potential Concern
Phosphorus	Primarily Regulated Pollutants
Ortho-phosphorus	Primarily Regulated Pollutants
Oil / Grease	Primarily Regulated Pollutants
Nitrogen	Primarily Regulated Pollutants
Nitrates	Primarily Regulated Pollutants
Nitrites	Primarily Regulated Pollutants
Ammonia	Primarily Regulated Pollutants
pH	Constituents of Potential Concern
PCBs	Primarily Regulated Pollutants
PAHs	Primarily Regulated Pollutants
Pesticides	Constituents of Potential Concern
Herbicides	Constituents of Potential Concern
BOD / COD	Constituents of Potential Concern
Trash	Primarily Regulated Pollutants

**Q3: For the pollutants in question 2, how does your agency measure performance of the post construction Stormwater BMP?**

*Respondent skipped this question*

**Q4: For The pollutants you checked in Question #2; list, if you can, values used for concentration limits, percent removal, mass loading, etc? (For example 2.0 ppm effluent limits or 90% removal of influent concentration)**

*Respondent skipped this question*

**PAGE 3: Stormwater Site Characteristics**

**Q5: Which site characteristics does your agency typically use to evaluate post construction Stormwater BMPs when pollutants in Question 2 are concerned.**

Soil type, Topography, Saturated media, Receiving waters

**PAGE 4: Operation**

**Q6: How are post construction Stormwater BMPS monitored in your jurisdiction?**

MS4

Routine Agency inspections, Effluent monitoring, Self reporting through permit requirements

**Q7: Does your Agency have mandatory maintenance reporting requirements for post construction Stormwater BMP performance?**

MS4

Yes

**Q8: Does your State Agency or Municipality require pollutant characterization when disposing of stormwater pond BMP Sediments?**

*Respondent skipped this question*

**Q9: Is your State Agency or Municipality addressing:**

*Respondent skipped this question*

**Q10: How is stormwater pond sediment characterized for disposal in your state or municipality?**

*Respondent skipped this question*

**PAGE 5: Contact information**

**Q11: Contact Information**

Agency

City of Billings

State/Province

Montana