

# Appendix A

## Environmental Management Plan Review Applications for Contaminated Media Management, Construction Dewatering and Active Chemical Treatment Systems

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### Water Quality Permitting

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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.



State of Oregon  
Department of  
Environmental  
Quality

This report prepared by:

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The purpose of this appendix is to assist permit applicants in complying with the requirements in Section 1.2.9 of the permit regarding DEQ review and approval of contaminated media management plans, construction dewatering, and active chemical treatment systems prior to the assignment of permit coverage. The registrant must complete an Environmental Management Plan (EMP), pay the review fee, and submit the required documents found on DEQ’s website and electronic reporting system with the 1200-C permit application when the following conditions exist or are anticipated. The 1200-C permit defines plans designed for contaminated media management, construction dewatering, and active chemical treatment systems as EMPs. If these conditions are discovered after registering for permit coverage, the EMP must be approved before work is initiated. The approved EMP becomes a component of the ESCP. This appendix is organized as follows:

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## **1. Contaminated Media Management**

This Appendix provides the EMP review application form for projects that will or have the potential of encountering contaminated soils, groundwater, or hazardous materials during construction activities. Section 1.2.9 of the permit requires the registrant to provide detailed information with the Contaminated Media Management Plan (CMMP) on the nature and extent of the contamination (concentration, location, and depth) as well as pollution prevention and/or treatment BMPs proposed to control the discharge of impacted soil, groundwater, or hazardous building materials debris in stormwater. In the event that undocumented contamination, underground storage tanks, or other potentially hazardous conditions are encountered that are not addressed in the Environmental Management Plan, discharges exposed to the contaminated media must cease and DEQ must be notified within 48 hours. The discharges exposed to the contaminated media may not occur until DEQ approves the CMMP.

DEQ may assign coverage under this permit after the registrant has included appropriate controls and implementation procedures designed to ensure that the above activities will not lead to discharges that cause an exceedance of water quality standards. In the absence of authorization, the registrant must apply for and receive coverage under an individual permit prior to discharging from the site.

# Contaminated Media Environmental Management Plan Review Application

Under Section 1.2.9 of the 2020 1200-C NPDES Construction Stormwater General Discharge Permit, if the project will or has the potential to encounter contaminated soils, groundwater, or hazardous materials during construction activities, you may not submit your 1200-C application without the following EMP application. Submit this form to describe your proposed contaminated media management plan.

## I. Registrant Information

Registrant Name:

Mailing Address:

Street:

City:

State, Zip Code:

Phone:

Email:

## II. Project/Site Information

Project/Site Name:

Project/Site Address:

Street/Location:

City:

State, Zip Code:-

County or Similar Government Subdivision:

Site contact name (if different from registrant):

Site contact phone (if different from registrant):

Name(s) of receiving waterbodies:

### III. Map

Attach a map that illustrates the entire site including all of the below items. Include this map in your Erosion and Sediment Control Plan (ESCP):

- DEQ Environmental Cleanup Site Information (ECSI) site number (if applicable)
- A list or table of all known contaminants with lab tests results showing concentration and depth
- A list of all disposal locations
- Notice of approval from local jurisdiction if discharge is to public storm system
- A map with sample locations
- Temporary Erosion and Sediment Control Plans specific to contaminated soils;
- Plans for offsite disposal of contaminated soils;
- Any relevant (related) portions of ESCP that address the management of contaminated and potentially contaminated construction stormwater and dewatering program (if applicable); and,
- The dewatering plan (if applicable)
- All proposed point(s) of discharge to receiving waterbodies
- All soil types within areas to be disturbed
- All area of earth disturbance
- Sufficient indication of topography to indicate where stormwater flows

Attach a schematic drawing of the proposed treatment system(s). Include all components of the treatment train, sample points, and pipe configurations. In addition to sufficient holding capacity upstream of treatment, the system must have the capacity to hold water for testing and to re-treat water that does not meet water quality standards.

### IV. Responsible Personnel

Treatment System Operator or

Company Name (if subcontracted out):

Street/Location:

City:

State, Zip Code

Responsible personnel. List personnel who will be responsible for operating the chemical treatment systems and application of the chemicals. Cite the training that the personnel have received in operation and maintenance of the treatment system(s) and use of the specific chemical(s) proposed.

## V. Proposed Treatment

Check proposed treatment system (if applicable).

Chitosan enhanced sand filtration with discharge to infiltration (ground water)

Chitosan enhanced sand filtration with discharge to temporary holding ponds (batch).

Chitosan enhanced sand filtration with discharge to surface waters (flow-through).

Other (describe below and submit documentation that the proposed system and chemical(s) demonstrate the ability to remove turbidity and produce non-toxic effluent/ discharge)

Check proposed cationic chemical(s) to be used:

FlocClear™ (2% chitosan acetate solution)

StormKlear™ LiquiFloc™ (1% chitosan acetate solution).

ChitoVan™ (1% chitosan acetate solution).

StormKlear™ LiquiFloc™ (3% Chitosan acetate solution)

Other:

Estimated Treatment Period Start Date:

Estimated Treatment Period End Date:

Describe sampling and recordkeeping schedule. Attach additional sheets as needed:

Explain why you have selected this proposed treatment system and chemicals. Reference how the soil types on your site influenced your choices. Describe or provide an illustration of how the site of the discharge will be stabilized and why the discharge location will not cause erosion of the discharge water's bank or bed (please note that a permit from the Corps and state agencies may be necessary to place rock in the water body for this stabilization). Attach as many additional sheets as needed for a full explanation. If you have a report from a chemical treatment contractor describing their recommended approach you may attach that.

I have documented and hereby certify that the following information is correct and has been documented in the ESCP for this project:

- The ESCP includes a complete site-specific description of the chemical treatment system herein proposed for use, including specifications, design, and Material Safety Data Sheets for all chemicals to be used.
- The controls to be used on the site are compatible with the safe and effective use of cationic chemical treatment.
- I verified through jar tests that the site soil is conducive to chemical treatment.
- I verified that the chemical treatment system operators for this project received training.
- I read, understand, and will follow all conditions and design criteria in the applicable use designation(s).
- If the discharge is to tribal waters, I notified the appropriate tribal government of the intent to use chemical treatment on a site located within that jurisdiction.
- I will keep the use level designation, operation and maintenance manual, and training certificate on site prior to and during use of chemical treatment.

A licensed engineer designed the system for this project including system sizing, pond sizing, and flow requirements. I verify that the discharge will not adversely affect downstream conveyance systems or stream channels (e.g. cause erosion).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official First Name, Middle Initial, Last Name:

Title:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Email:

## **2. Construction Dewatering**

This Appendix provides the EMP review application form for projects that will perform construction dewatering for the purpose of lowering groundwater. The registrant must provide information with a Construction Dewatering Plan on the groundwater lowering (location, depth, and rate) to be performed on site. The treatment BMPs proposed to control the discharge of groundwater must be addressed in the EMP. An EMP is not required for dewatering accumulated water due to shallow excavation activities (see Section 2.4). When construction dewatering is proposed, Section 1.2.9 of the permit requires the registrant to submit the following EMP review application with the 1200-C permit application. DEQ will assign coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that the construction dewatering performed on site will not lead to an exceedance of water quality standards.

DEQ may assign coverage under this permit after the registrant has included appropriate controls and implementation procedures designed to ensure that the above activities will not lead to discharges that cause an exceedance of water quality standards. In the absence of authorization, the registrant must apply for and receive coverage under an individual permit prior to discharging from the site.

# Construction Dewatering Environmental Management Plan Review Application

Under Section 1.2.9 of the 2020 1200-C NPDES Construction Stormwater General Discharge Permit, if you plan to perform construction dewatering for the purpose of lowering groundwater, you may not submit your 1200-C application without the following EMP application. Submit this form to describe your proposed construction dewatering.

## I. Registrant Information

Registrant Name:

Mailing Address:

Street:

City:

State, Zip Code

Phone:

Email:

## II. Project/Site Information

Project/Site Name:

Project/Site Address:

Street/Location:

City:

State, Zip Code:-

County or Similar Government Subdivision:

Site contact name (if different from registrant):

Site contact phone (if different from registrant):

Name(s) of receiving waterbodies:

### III. Map

Attach a map that illustrates the entire site including all of the below items. Include this map in your Erosion and Sediment Control Plan (ESCP):

- All receiving waterbodies
- All proposed location(s) of chemical treatment system(s)
- All proposed point(s) of discharge to receiving waterbodies
- All soil types within areas to be disturbed
- Identify areas on site that require dewatering;
- Process utilized (e.g. pumps, centrifugation, filtration, filter press) and why the selection of any materials/chemicals used for treatment are suited to the characteristics of the project contaminants ;
- Approximate volume of water and discharge rate, including discharge occurrence frequency (i.e. batch or continuous);
- Re-use opportunities; and
- Notice of approval from local jurisdiction if discharge is to public storm system.
- System Operations and Maintenance Plan:
- Contact information for system operators
- Contingency plan for shut downs
- Copies of applicable manufacturer's specifications regarding the use of specific treatment chemicals and/or chemical treatment systems
- A description of the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to use of the treatment chemicals at the site
- System schematic including discharge dispersing device, and locations of system on project site, inlet and discharge
- Sampling plan, frequency, and name of person taking samples
- Treatment plan must be prepared and stamped by a Professional Engineer (PE)
- Spill prevention and response plan
- All area of earth disturbance
- Sufficient indication of topography to indicate where stormwater flows
- Attach a schematic drawing of the proposed treatment system(s). Include all components of the treatment train, sample points, and pipe configurations. In addition to sufficient holding capacity upstream of treatment, the system must have the capacity to hold water for testing and to re-treat water that does not meet water quality standards.

### IV. Responsible Personnel

Treatment System Operator or

Company Name (if subcontracted out):

Street/Location:

City:

State, Zip Code:

Responsible personnel. List personnel who will be responsible for operating the chemical treatment systems and application of the chemicals. Cite the training that the personnel have received in operation and maintenance of the treatment system(s) and use of the specific chemical(s) proposed.

**V. Proposed Treatment**

Check proposed treatment system.

Chitosan enhanced sand filtration with discharge to infiltration (ground water)

Chitosan enhanced sand filtration with discharge to temporary holding ponds (batch).

Chitosan enhanced sand filtration with discharge to surface waters (flow-through).

Other (describe below and submit documentation that the proposed system and chemical(s) demonstrate the ability to remove turbidity and produce non-toxic effluent/ discharge)

Check proposed cationic chemical(s) to be used:

FlocClear™ (2% chitosan acetate solution)

StormKlear™ LiquiFloc™ (1% chitosan acetate solution).

ChitoVan™ (1% chitosan acetate solution).

StormKlear™ LiquiFloc™ (3% Chitosan acetate solution)

Other:

Estimated Treatment Period Start Date:

Estimated Treatment Period End Date:

Describe sampling and recordkeeping schedule. Attach additional sheets as needed:

Explain why you have selected this proposed treatment system and chemicals. Reference how the soil types on your site influenced your choices. Describe or provide an illustration of how the site of the discharge will be stabilized and why the discharge location will not cause erosion of the discharge water's bank or bed (please note that a permit from the Corps and state agencies may be necessary to place rock in the water body for this stabilization). Attach as many additional sheets as needed for a full explanation. If you have a report from a chemical treatment contractor describing their recommended approach you may attach that.

## VI. Certification Information

I have documented and hereby certify that the following information is correct and has been documented in the ESCP for this project:

- The ESCP includes a complete site-specific description of the chemical treatment system herein proposed for use, including specifications, design, and Material Safety Data Sheets for all chemicals to be used.
- The controls to be used on the site are compatible with the safe and effective use of cationic chemical treatment.
- I verified through jar tests that the site soil is conducive to chemical treatment.
- I verified that the chemical treatment system operators for this project received training.
- I read, understand, and will follow all conditions and design criteria in the applicable use designation(s).
- If the discharge is to tribal waters, I notified the appropriate tribal government of the intent to use chemical treatment on a site located within that jurisdiction.
- I will keep the use level designation, operation and maintenance manual, and training certificate on site prior to and during use of chemical treatment.
- A licensed engineer designed the system for this project including system sizing, pond sizing, and flow requirements.
- I verify that the discharge will not adversely affect downstream conveyance systems or stream channels (e.g. cause erosion).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official First Name, Middle Initial, Last Name:

Title:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Email:

### **3. Active Chemical Treatment Systems**

This Appendix provides the EMP review application for projects with an active treatment system (e.g. electro-coagulation, flocculants, filtration, polymers, hydrochloric or sulfuric acid) for sediment, pH neutralization, or other pollutant removal is planned or implemented. When “cationic treatment chemicals” are proposed to treat stormwater and/or authorized non-stormwater prior to discharge, Section 1.2.9 of the permit requires the registrant to submit the following EMP review application with the 1200-C permit application. DEQ will assign coverage under this permit after the registrant has included appropriate controls and implementation procedures designed to ensure that the use of cationic treatment chemicals will not lead to an exceedance of water quality standards.

DEQ may assign coverage under this permit after the registrant has included appropriate controls and implementation procedures designed to ensure that the above activities will not lead to discharges that cause an exceedance of water quality standards. In the absence of authorization, the registrant must apply for and receive coverage under an individual permit prior to discharging from the site.

# Active Chemical Treatment System Environmental Management Plan Review Application

Under Section 1.2.9 of the 2020 1200-C NPDES Construction Stormwater General Discharge Permit, if you plan to add “cationic treatment chemicals” to stormwater and/or authorized non- stormwater prior to discharge, you may not submit your 1200-C application without the following EMP application. Submit this form to describe your proposed use of cationic treatment chemicals.

## I. Registrant Information

Registrant Name:

Mailing Address:

Street:

City:

State, Zip Code

Phone:

E-mail:

## II. Project/Site Information

Project/Site Name:

Project/Site Address:

Street/Location:

City:

State, Zip Code

County or Similar Government Subdivision:

Site contact name (if different from registrant):

Site contact phone (if different from registrant):

Name(s) of receiving waterbodies:

### III. Map

Attach a map that illustrates the entire site including all of the below items. Include this map in your Erosion and Sediment Control Plan (ESCP):

- All receiving waterbodies
- All proposed location(s) of chemical treatment system(s)
- All proposed point(s) of discharge to receiving waterbodies
- All soil types within areas to be disturbed
- All area of earth disturbance
- Sufficient indication of topography to indicate where stormwater flows

Attach a schematic drawing of the proposed treatment system(s). Include all components of the treatment train, sample points, and pipe configurations. In addition to sufficient holding capacity upstream of treatment, the system must have the capacity to hold water for testing and to re-treat water that does not meet water quality standards.

### IV. Responsible Personnel

Treatment System Operator or Company Name (if subcontracted out):

Street/Location:

City:

State, Zip Code:

Responsible personnel. List personnel who will be responsible for operating the chemical treatment systems and application of the chemicals. Cite the training that the personnel have received in operation and maintenance of the treatment system(s) and use of the specific chemical(s) proposed.

### V. Proposed Treatment

Check proposed treatment system.

Chitosan enhanced sand filtration with discharge to infiltration (ground water)

Chitosan enhanced sand filtration with discharge to temporary holding ponds (batch).

Chitosan enhanced sand filtration with discharge to surface waters (flow-through).

Other (describe below and submit documentation that the proposed system and chemical(s) demonstrate the ability to remove turbidity and produce non-toxic effluent/ discharge)

Check proposed cationic chemical(s) to be used:

FlocClear™ (2% chitosan acetate solution)

StormKlear™ LiquiFloc™ (1% chitosan acetate solution).

ChitoVan™ (1% chitosan acetate solution).

StormKlear™ LiquiFloc™ (3% Chitosan acetate solution)

Other:

Estimated Treatment Period Start Date: \_\_\_\_\_ Estimated Treatment Period End Date: \_\_\_\_\_

Describe sampling and recordkeeping schedule. Attach additional sheets as needed:

Explain why you have selected this proposed treatment system and chemicals. Include an explanation of why the use of cationic treatment chemicals is necessary at the site. Reference how the soil types on your site influenced your choices. Describe or provide an illustration of how the site of the discharge will be stabilized and why the discharge location will not cause erosion of the discharge water's bank or bed (please note that a permit from the Corps and state agencies may be necessary to place rock in the water body for this stabilization). Attach as many additional sheets as needed for a full explanation. If you have a report from a chemical treatment contractor describing their recommended approach you may attach that.

## VI. Certification Information

I have documented and hereby certify that the following information is correct and has been documented in the ESCP for this project:

- The ESCP includes a complete site-specific description of the chemical treatment system herein proposed for use, including specifications, design, and Material Safety Data Sheets for all chemicals to be used.
- The controls to be used on the site are compatible with the safe and effective use of cationic chemical treatment.
- I verified through jar tests that the site soil is conducive to chemical treatment.
- I verified that the chemical treatment system operators for this project received training.
- I read, understand, and will follow all conditions and design criteria in the applicable use designation(s).
- If the discharge is to tribal waters, I notified the appropriate tribal government of the intent to use chemical treatment on a site located within that jurisdiction.
- I will keep the use level designation, operation and maintenance manual, and training certificate on site prior to and during use of chemical treatment.
- A licensed engineer designed the system for this project including system sizing, pond sizing, and flow requirements.
- I verify that the discharge will not adversely affect downstream conveyance systems or stream channels (e.g. cause erosion).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official First Name, Middle Initial, Last Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Email: \_\_\_\_\_