



City of Grand Rapids  
Environmental Services Department  
Policies and Procedures

<b>Title:</b> Element 10 – Operational Controls of Critical Control Points	<b>Created by:</b> Dave Harris <b>Approved by:</b> William R. Kaiser
<b>Policy Number:</b> 1103-10 Version: 7.0	<b>Effective:</b> 10/26/2017

### General

This element of the BMP details the operational controls utilized at each critical control point (CCP)<sup>A</sup> in the biosolids value chain. Well defined operational controls are fundamental to implementing continual improvement strategies<sup>B</sup> that maintain a long term viable program and effectively manage potential environmental impacts.

### Procedures

- 1) CCP and associated operational controls and environmental impacts are identified and cross referenced in Element 3 Table 3.1 of the BMP.
  - a) Development of all operational controls shall be based on sound management practices identified in well respected sources including but not limited to:
    - i) NBP "Manual of Good Practice"
    - ii) Water Environment Federation's "Manual of Practice" documents<sup>C</sup>
    - iii) State of Michigan's Wastewater operating manuals<sup>C</sup>
    - iv) Michigan Water Environment Association
- 2) Preventive maintenance procedures for equipment, instrumentation, electrical, facilities, and collection system are maintained within CMMS systems<sup>D</sup>.
- 3) The City's contractors will identify and establish operational controls for any activities they undertake which could impact the biosolids value chain. These are included in Table 3.1 of Element 3 in the BMP.
- 4) The WPS<sup>E</sup> or their delegate will periodically<sup>F</sup> verify that contractor operational controls are in place, documented and functional<sup>G</sup>.
- 5) Periodically<sup>F</sup> the WPS or their delegate will interview one or more contractor employees to verify that they are aware of the operational controls and have been trained sufficiently to carry them out<sup>G</sup>.
- 6) Operational controls shall be reviewed annually during the last quarter of the calendar year<sup>F</sup>. The process shall be as follows:
  - a) During the last calendar quarter of the year the lead responsible party assigned to each critical control point (reference Table 7.1) shall review the operational controls with the author(s) of the operational controls to verify if the controls are effectively managing the environmental impacts.

Electronic copies on the “Sharepoint” are considered controlled. All other copies are to be considered uncontrolled

- b) If revisions are necessary plant employees and contractors whose work may be impacted by them, must be informed.
  - c) Complete and submit to the BMP coordinator form 10.1 “Annual Operational Controls Review”<sup>H</sup> one form for each Critical Control Point reviewed.
- 7) Information resulting from the reviews will be formally documented and a summary included in the City’s periodic biosolids program performance report and communicated to employees, interested parties, and the general public<sup>I</sup>.

## **References**

Appendix A Glossary

Appendix B Tables, Figures, Forms

Appendix C CCP Postings

---

<sup>A</sup> Reference Element 3 Critical Control Points – Table 3.1 “Critical Control Points”

<sup>B</sup> Reference Element 5 Goals and Objectives

<sup>C</sup> WEF and Michigan MOP manuals are maintained in the ESD Manager’s office

<sup>D</sup> Maximo & Cityworks CMMS

<sup>E</sup> Reference Element 7 Roles and Responsibilities – Table 7.1 “Roles and Responsibilities – Internal BMP Team” and Table 7.3 “Internal BMP Team Name and Contact Information”, WPS Identified as Designated Project Manager

<sup>F</sup> Reference Element 7 Roles and Responsibilities – Figure 7.2 “Schedule of Annual Biosolids Activities”

<sup>G</sup> Reference Form 10.2 “Contractor Compliance Inspection”

<sup>H</sup> Reference Form 10.1 “Annual Operational Controls Review”

<sup>I</sup> Utilizing means and methods as identified in Element 9 Communication and Public Outreach.

Electronic copies on the “Sharepoint” are considered controlled. All other copies are to be considered uncontrolled

**Form 10.1 Annual Operational Controls Review**

<b>Annual Operational Controls Review</b>		
Review operational controls listed in Table 3.1 to determine if environmental impacts are effectively being managed and review monitoring and measurement data. Coordinate with the author(s) as needed to revise SOP’s and notify employees and contractors who may be impacted by the operational controls that the operational control has been revised. Complete one review form for all operational controls for a critical control point and submit to the BMP coordinator. If new SOP’s are implemented, coordinate with BMP Coordinator on revising the BMP manual as needed.		
<b>Critical Control Points (circle only one)</b>		
Significant Industrial Users	Commercial User Discharges	Discharge Authorization Permits
Pollutant Minimization	Septage (Portable Toilet) Receiving	Solids Screening & Grit Collection
Scum	Primary Treatment	Raw Sludge Storage
Secondary Treatment	WAS Thickening	Centrifuge Dewatering
Odor Control	Truck Cover	Truck Transport
Truck Washing Procedure	Truck Loading	Composting
Landfill(s)		
Operational Control (List below)	Comments	

(Note: Deviations are to be considered a nonconformance – reference Element 14)

“I have reviewed all operational controls for the critical control point noted above and worked with the author(s) as needed to revise and update them as needed”

Date (MM/DD/YYYY) \_\_\_\_/\_\_\_\_/\_\_\_\_ Signed: \_\_\_\_\_

Electronic copies on the “Sharepoint” are considered controlled. All other copies are to be considered uncontrolled

Form 10.2 Contractor Compliance Inspection

Contractor Compliance Inspection		
In accordance with Element 7 Figure 7.2 review Contractor operational controls, monitoring and measurement, training, and employee awareness. Complete 1 form for each contractor and submit completed forms to the BMP coordinator.		
Date of Inspection		Contractor
Inspection Questions	Yes/No	Comments
Operational controls in place as specified in Table 3.1		
Have employees received adequate training to carry out job responsibilities (interview 2 or more employees)		
Are contractor employees familiar with the BMP		
Inspection comments and recommendations for follow-up action: (Note: Deviations are to be considered a nonconformance – reference Element 14)		

“I have conducted an inspection of the above named Contractor in accordance with the City’s BMP requirements.”

Date Submitted: (MM/DD/YYYY) \_\_\_\_/\_\_\_\_/\_\_\_\_

Signed: \_\_\_\_\_