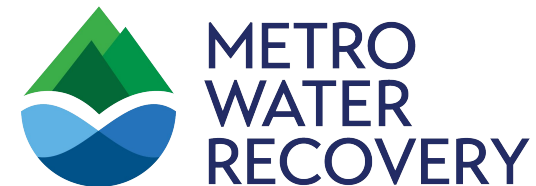


Colored Wastewater Generator Sector

What? When? Why? Who? How?

Chip Padilla & Meg Parker
October 12, 2021



What is the Colored Wastewater Generator Sector?

When have we seen colored wastewater?

Why is controlling this Sector important and **why** is colored wastewater bad?

Who has the potential to discharge colored wastewater?

How can we control discharges from this sector?



What is the Colored Wastewater Generator Sector?

INCLUDES:

- Printers, Paper & Cardboard Manufacturers,
- Paint, Ink, Dye and Colored Powder Users & Manufacturers,
- Chemical and Cleaning Supply Manufacturers,
- And similar processes that generate colored wastewater or waste streams.



Impacts to our plant

- **When** have we seen colored wastewater?
- **Why** is controlling the Sector important and **why** is colored wastewater bad?
- Unusual observations
 - From September 2017 to October 2021 there have been 14 Unusual Observations (UO)
 - 13 have been color related
 - 1 was foam related
 - Only the foam related UO was solved.

Who has the potential to discharge colored wastewater?

- There are 180 business types in PIMS Survey database.
- 26 of the 180 business types fall into the colored wastewater Sector/category.
- From the 26 business types, there are ~**510** individual IUs.
- Of the ~510 IUs:
 - 366 of them are: Printers, Paperboard & Paper, Soap & Detergent or Sign Manufacturers





The inspection numbers:

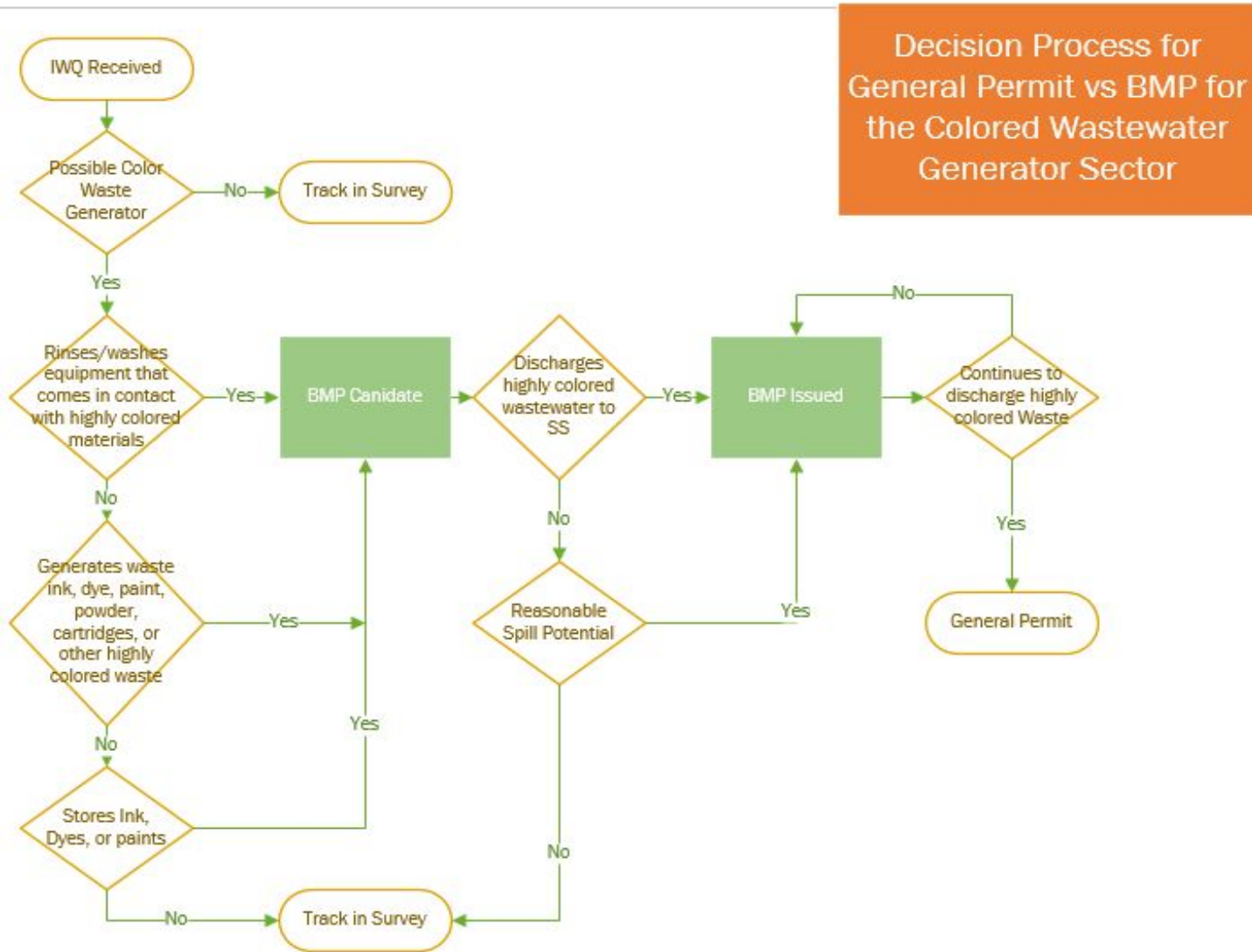
Since August of 2020:

100+ Color Sector inspections have been conducted.
Of those,

- 14 Initial Inspections –
(Full facility inspection/write-up)
August-December 2020.
- 13 Limited Inspections – Conducted by 2 teams
on October 30, 2020, following an Unusual
Observation at Hite.
- 80+ Color-Specific Inspections -
Using a new PDF fillable inspection form in 2021.



How can we control discharges from this sector?





Breakdown of the inspection numbers

Evaluation of the 100+ Inspections using the BMP Decision Tree:

- 60+ IUs will **not need** a BMP Packet and will continue to be tracked in PIMS Survey database.
- 36 IUs will need a BMP Packet (24 mailed 7/1/21 & 12 mailed 9/22/21)
- 13 will need further evaluation (only a limited inspection was conducted).

Specifics

- What gives us our legal authority?
 - R & R Section 6.16, 6.25
- How will it work?
 - BMP Rationale - BMPs are all connected to a specific prohibition.
- BMP by type
 - Physical structures/engineering controls
 - Housekeeping
 - SOPs/Administrative Controls
 - General Permit
- BMP checklist/inspection form

Legal Authority

R&R 6.16 SECTOR CONTROL PROGRAMS

Metro Water Recovery may establish:

- Sector control programs based on Best Management Practices (BMP) to control specific pollutants.
- Policies for sector control programs as necessary.
- Industrial Users subject to these sector control programs may be required to install and operate wastewater treatment systems and/or implement BMPs.

Legal Authority

R&R 6.25 INFORMATION SUBMITTAL, INSPECTION AND SAMPLING, RECORD KEEPING REQUIREMENTS

Metro Water Recovery may require any Industrial User:

- To submit information as necessary to determine compliance with the requirements of these Rules and Regulations.
- Must be signed and certified.
- Enter and inspect the facilities of any Industrial User to ascertain compliance with the requirements of these Rules and Regulations.

BMP Rationale

- The Sector's required BMPs are based on specific prohibitions in Section 6.13 & 6.14 of the Rules & Regulations
- R&R 6.13.4 - ...concentrated dye wastes or highly colored...
- R&R 6.14.1 – ...liquids, solids, gases...to cause fire or explosion...
- R&R 6.14.6 – ...containing a toxic substance... interfere with any sewage treatment process
- R&R 6.14.2 – ...cause an obstruction...
- R&R 6.14 - ...Pass through or Interfere with the operation or performance of the Metro District.



Sector Control Mechanism

S

BMP

BEST MANAGEMENT PRACTICES (BMPs) for the: Colored Wastewater Generator Sector

The Following BMPs apply to all wastewater discharges and waste streams from the **Colored Wastewater Generator Sector** to the sanitary sewer.

Within **60 days**, color wastewater generator sector facilities shall implement BMPs according to the requirements contained below. The color sector encompasses Printers, Paper & Cardboard manufactures, Paint, Ink, Dye and Colored Powder Users & Manufactures, Chemical and Cleaning Supply Manufactures and similar processes that generate colored wastewater or waste streams.

The Discharger shall implement BMPs through structural controls, facility processes, administrative controls, operating and housekeeping practices to eliminate potential to violate Metro's Rules and Regulations.

All required BMPs are listed below in bold font. *All recommended BMPs are in italics font.*

1. Physical structures/engineering controls

- a. **Store all chemicals, solvents, colored materials, cleaning products, and waste materials away from a floor drain that discharges to the sanitary sewer system or provide secondary containment.**
- b. **Install and maintain screens with openings no greater than 1/2 inch on all floor drains and sinks.**

Housekeeping

- c. **Dispose or recycle all solids collected in screens.**
Post Prohibited Discharge signage.
Follow the SOP for wiping and dry cleaning (no use of water or wastewater discharge to the sanitary sewer) components that come in contact with colored and cleaning materials - using towels, rags, and cleaning products.
- d. **Clean and maintain screening devices on a scheduled routine to avoid back-ups.**

3. SOPs/Admin Controls

- a. **Establish and implement procedures and/or processes for eliminating concentrated dye or other highly colored discharges to the sanitary sewer.**
 - i. **At a minimum the procedures should include, a list of all chemicals used at the facility and how each chemical is stored/managed.**
 - ii. **Maintain a training log of the above SOP for all staff.**
 - iii. **All chemicals and process wastes must either be placed on secondary containment or moved away from floor drains to prevent a spill or a slug discharge into the drain.**
- b. **Establish and implement procedures and/or processes for managing waste streams generated from all colored wastewater processes to reduce potential to violate Metro's Rules and Regulations.**

Sector Control Mechanisms

General Permit



GENERAL PERMIT

No. GXXXX - X

Pursuant to the provisions of Section 6 of the Metro Wastewater Reclamation District's *Rules and Regulations Governing the Operation, Use and Services of the System*, as amended (hereinafter referred to as the "Rules and Regulations"), **Facility Name** ("Permittee") located at **Address, City, State Zip Code**, is:

- (1) Authorization to discharge wastewater associated with the **Colored Wastewater Generator Sector** to the Metro Wastewater Reclamation District ("District" or "Metro District") sewer system.
- (2) Prohibited from discharging to the Metro Wastewater Reclamation District ("District") Publicly Owned Treatment Works ("POTW"), any process wastewater or any substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261.
- (3) The duration of this General Permit (GP) is 5 years and in which there are no significant changes in pollutant characteristics or discharge volume. General Permits may also be modified where new methods or technologies are developed and determined by the District to be more appropriate for complying with District limits.

This Permit is issued to: **Facility Name**
Address
City, State, ZipCode

For the site located at: **Facility Name**
Address
City, State, Zip Code

This Permit shall become effective **Xxxxx XX, 20XX** (and shall supersede any previous permits and amendments).

This Permit shall expire **Xxxxx XX, 20XX**.

The deadline to apply for permit reissuance is **Xxxxxx XX, 20XX**.

Metro Wastewater Reclamation District telephone number: (303) 286-3000

Issued this **XXth** day of **Xxxxx 20XX**, by the Metro Wastewater Reclamation District.

Authorized By: _____
Jennifer Robinett, Director of Environmental Services

BMP Checklist

Best Management Practices Checklist Colored Wastewater Generator Sector

Best Management Practices	Verification
Physical structures/engineering controls	
Store all chemicals, solvents, colored materials, cleaning products, and waste materials away from a floor drain that discharges to the sanitary sewer system and provide secondary containment. (Section 1a)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>
Screens with ½ inch openings on all floor drains and sinks? (Section 1b)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>
Housekeeping	
Procedure or process for cleaning sink and floor drain screens? (Section 2)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>
Is the Prohibited Discharge signage posted? (Section 2b)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>
SOPs/Admin Controls	
Procedures and/or processes for eliminating concentrated dye or other highly colored discharges to the sanitary sewer? (Section 3a)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>
Does the Facility maintain records/manifests/logs for chemical storage? (Section 3ai and 3aii)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>
Procedures and/or processes for managing waste streams generated from all colored wastewater processes? (Section 3b)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>
Does the Facility maintain records/manifests/logs for waste disposal? (Section 3bi and 3bii)	Yes <input type="checkbox"/> No <input type="checkbox"/> None on site <input type="checkbox"/>



Inspection Fillable Form

Site-Specific Inspection Checklist

Background Information

Inspection Date: _____ Time: _____ Metro Connector: _____

Business Name: _____

Facility Address: _____

Mailing Address (if different): _____

Phone Number: _____

Facility Website: _____ Fax: _____ E-Mail: _____

Representatives Present for Inspection

Facility Representative(s): _____

Metro District Representative(s): _____

Contacts at this Location

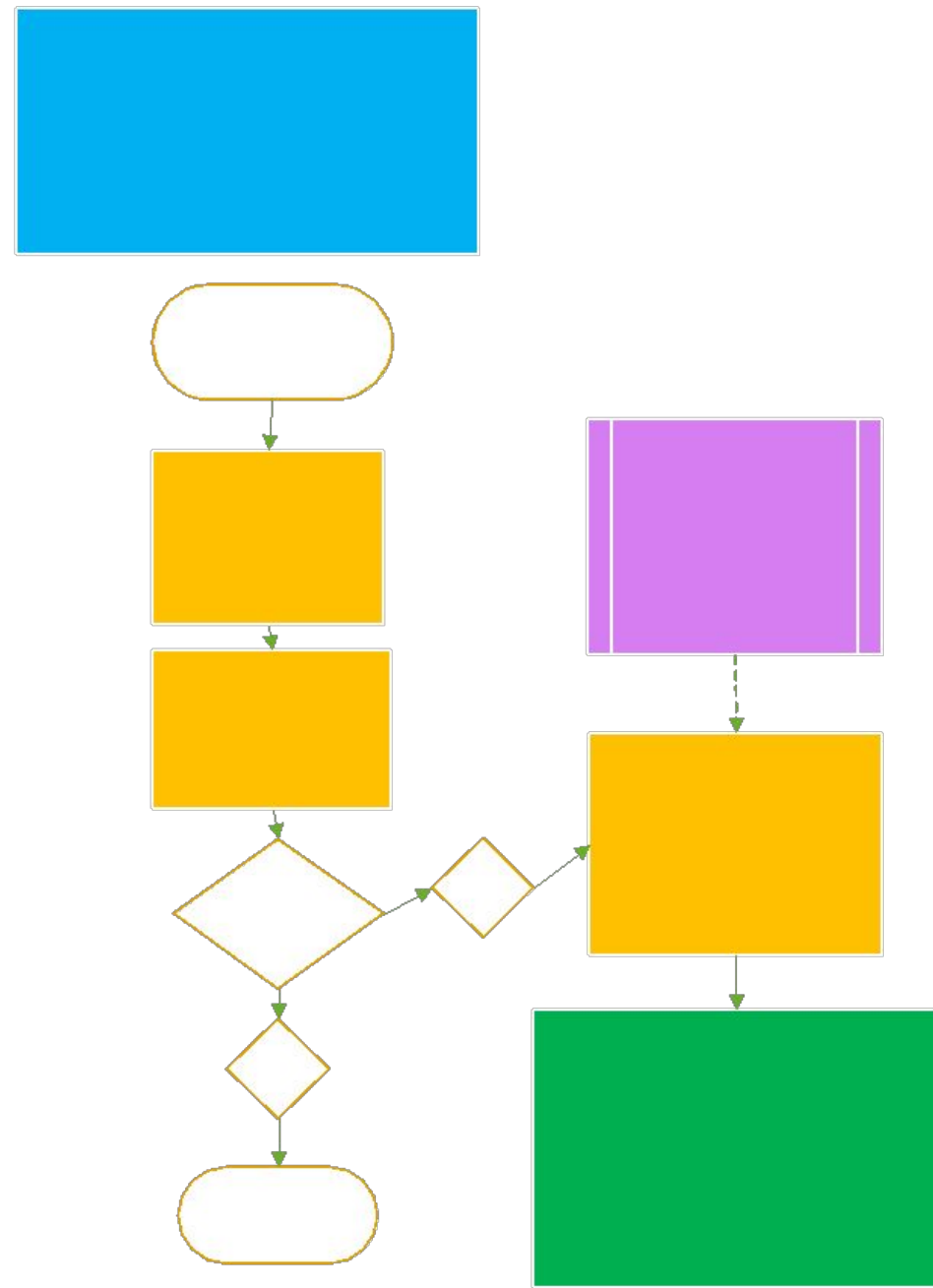
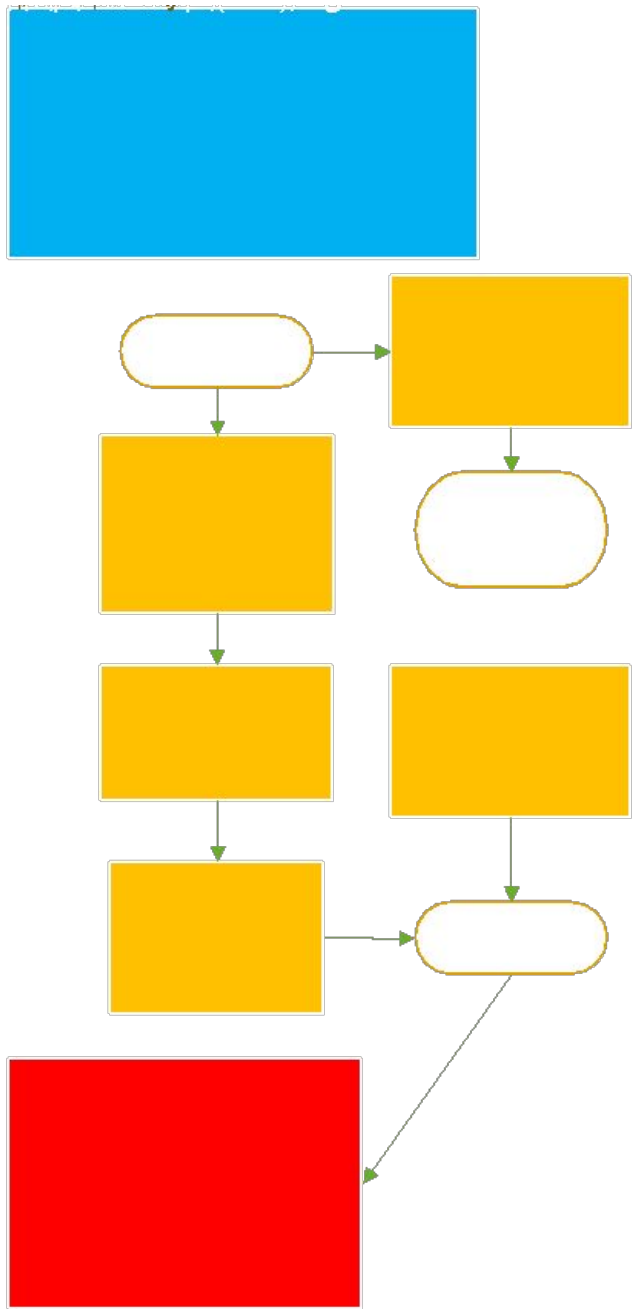
Representatives	Titles	Phone / E-mail	Primary Contact
			Yes <input type="checkbox"/> No <input type="checkbox"/>
			Yes <input type="checkbox"/> No <input type="checkbox"/>
			Yes <input type="checkbox"/> No <input type="checkbox"/>

Standard Hours of Operation:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

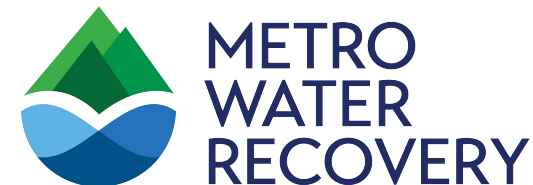


Current Process vs Future Process



Implementation Plan

1. Inspections/follow-up inspections.
2. Send an inspection follow-up letter/BMP requirements Packet/phone call.
3. Understand Metro Water Recovery's current and future resources (e.g., materials, time, staff allocation).
4. Meet with Strategy/Communications to discuss the color sector and our intentions.
5. Create a Webinar
 - Use this as outreach to the Sector to discuss ideas, success stories, issues.
6. Website – update Metro's external website
7. Reach out to Associations (through conventions and lists)
 - Assemble a team to research associations and create list.
8. Create a PowerPoint training for IUs.
9. Meet with Board to discuss roll-out of the BMP and have Connector support explaining this control mechanism.



Summary



- What?
- When?
- Why?
- Who?
- How?



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Questions