



STATE OF WASHINGTON  
**DEPARTMENT OF ECOLOGY**

Central Region Office

1250 West Alder St., Union Gap, WA 98903-0009 • 509-575-2490

January 17, 2023

Bill Preston  
City of Yakima  
129 N. 2<sup>nd</sup> Street  
Yakima, WA 98901

**Re: Ecology Comments on Work Plan for Post-Construction GW Sampling Interim Action:**

- **Site Name:** Interstate 82 Exit 33A Yakima City Landfill
- **Site Address:** 805 N. 7<sup>th</sup> Street, Yakima
- **Facility/Site ID No.:** 1927
- **Cleanup Site ID No.:** 3853
- **Agreed Order No.:** DE 15861

Dear Bill Preston:

The Washington State Department of Ecology (Ecology) has the following comments on the *“Work Plan for Post-Construction Groundwater Sampling Interim Action – Roadway Project Closed City of Yakima Landfill Site Yakima, Washington”* dated October 5, 2022.

**Nature and Extent of Contamination**

1. The nature and extent of contamination have not been sufficiently depicted in the figures. Please include figures visualizing the areal and vertical distribution and concentrations of hazardous substances in the soil and groundwater due to the release(s). Figures provided to date have generally included administrative boundaries (ex., tax parcel, Right-of-Way (ROW)), a dashed line representing the approximate extent of Municipal Solid Waste (MSW), and well locations. While relevant to understanding site features and facilitating spatial awareness, administrative boundaries do not indicate the nature and extent of contamination; and therefore, do not represent the boundary of the (Yakima Landfill) Site. Future submittals must include a precise distinction between the Boise Mill and Yakima Landfill Sites, given their administrative separation. There can be no grey area as to which monitoring wells represent conditions at which Site.
2. Please clarify whether or not the responsibility for specific contaminants been agreed upon and documented by the Boise Mill and Yakima Landfill Potential Liable Parties (PLPs). Please clarify if any Yakima Landfill COPCs are believed to have migrated from a source at the Boise Mill Site, and if so, clarify if the contaminant been identified as a COPC, with extent delineated for the Boise Mill Site.

3. Please clarify whether or not there is a documented agreement between the PLPs regarding the location of the administrative boundary separating the Sites.
4. **Below is a required list of figures:**
  - a. Concentrations of Contaminants of Potential Concern (COPCs), both individually and in aggregate. This should include release sources, sampling locations, concentrations of contaminants at each sampling location for all dates, contaminant concentration gradients, and concentration trends over time.
  - b. The nature and extent of each COPC should be clearly shown on a figure or figures.
  - c. The concentrations of COPCs should be shown in the figure.
  - d. Concentration locations and trends over time.
  - e. The Petroleum Contaminated Soil (PCS) identified and removed during the IA (location, depth, contaminants, and concentrations) should be included in the figures. This is relevant to the source of GW contamination, evaluation of the COPCs, and sufficiency of the well network.
  - f. Include GW potentiometric maps, along with a discussion (discussion should include any anomalous events or issues with data), to demonstrate the sufficiency of the well network to evaluate the GW-SW pathway.
  - g. A line demarcating the known or inferred boundary of the Site.

*Reminder:* A Site (aka Facility) is defined as “any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft; **or any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located**”. A Site is not defined by administrative boundaries.

#### **COPCs and PUCLs**

1. Table 1: Post-Construction Groundwater Analytical Program has been significantly modified from the Pre-Construction Groundwater Analytical Program. Presumably, this is due to the development of revised PCULs. Section 6.0 references include the citation below, but no reference or discussion is included in the work plan.

*Ecology and Landau. 2021. Re: Yakima Landfill Site—Revised Preliminary Cleanup Levels. Virtual Meeting and Email Communications between Arthur Buchan and Jennifer Lind, Washington State Department of Ecology, and Piper Roelen, Landau Associates, Inc. June 24 and September 13.*



2. The modified analytical program is based on the City of Yakima's (City) consultant (Landau Associates, Inc. (Landau)) recommendations for the removal of specific analytes from the draft list of revised COPCs. **NOTE that Ecology has not formalized or approved Landau's recommendations. (Ecology comments on recommendations are attached.)**
3. Removal of COPCs for specific media should be accompanied by a discussion in the work plan, as well as figures illustrating the rationale for the removal of each COPC for each medium impacted. Examples include:
  - a. If Landau has determined that a COPC is not present at the Yakima Landfill Site, only at the Boise Mill Site, show this in a figure and explain the rationale.
    - i. \*In this case Landau will also need to verify the extent of the COPC is recognized and acknowledged by the Boise Mill Site. If the two (2) Sites are not in agreement, then this will need to be addressed.
  - b. If Landau has determined that a COPC was detected during a single monitoring event, but enough monitoring events have occurred since (at sufficiently representative times of year) to empirically demonstrate the chemical should be eliminated as a COPC from specific media; then show this in a figure and explain the rationale.

#### **Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP)**

1. Section 2.0 Planned Activities states the SAP and QAPP from the pre-IA groundwater monitoring work plan will be used for the proposed work. An updated/revised SAP and QAPP are required, and should address the following:
  - a. Schedule of the proposed (and future) monitoring events, discussion of timing (seasonal) and the relevance to previous sampling events, screening levels/Preliminary Cleanup Levels (PCULs), laboratory analytical detection limits, additional/modified well locations, document any changes to the analytical program or methods, etc.
  - b. Brief discussion of the process used to develop the PCULs. Include any groundwater applicable or relevant and appropriate requirements (ARARs), any site-specific groundwater screening levels, and preliminary cleanup levels that may apply at this Site. Please include current any applicable numeric and non-numeric criteria or screening levels at a minimum on tables showing analytes for each chemical/parameter group like Table B-2 of the QAPP. Verify target reporting limits are at least as low as applicable screening criteria or preliminary cleanup levels (PCULs).
  - c. To facilitate use in the field and document review, include updated versions of the SAP and QAPP with the revised draft Work Plan.
2. Comment on current SAP, second bullet on page A-3-4, Section 3.4 Sample Collection, on the last line, "maximum of 20 minutes, as described below." Confirm this is an accurate statement and should not read "minimum." If "maximum" is the correct term, elaborate on the method to determine stabilization of field parameters.



3. Comment on current QAPP:
  - a. On Table B-1, under the Data Quality Indicator (DQI) for Representativeness, in addition to cooler temperature, include well stabilization parameter thresholds. This would apply to all analyte/parameter groups for groundwater.
  - b. On Table B-2, under groundwater reporting limit goals, include applicable ARARs, any non-numeric criteria, site-specific screening levels, and applicable PCULs.
  - c. On Table B-2, it is not clear why chromium is identified as a total (unfiltered) sample only. Please explain this in either notes in the table or in the corresponding text.

### **Replacement Monitoring Well Installations**

1. The Work Plan discusses the replacement of MW-17, MW-101, and MW-106. These three (3) wells may not be enough to sufficiently define the down-gradient extent of the contamination.
2. For example, the area down-gradient of MW-7 does not appear to be represented by the current or proposed well network.
3. The wells selected to represent the down-gradient extent of contamination should be discussed in greater detail, including, a more robust discussion of groundwater gradient, well locations vs. COPC concentrations, potential data gaps, etc.
4. Ecology agrees with the following:
  - a. Two additional wells (MW-102 and MW-104) were removed prior to the Interim Action (IA). These wells are not proposed for replacement due to the lack of unique data or location-specific information about groundwater quality at the Site that is not available from other Site monitoring wells.
  - b. Neither well had comparatively high number of COPC detections, and no max concentrations were present at these locations.
  - c. MW-102 is located down-gradient of FPP-MW-3, and up-gradient of MW-106, and both well locations are included in the proposed sampling plan.
  - d. Likewise, MW-104 will be sufficiently represented by both up- and down-gradient well locations.
5. Please provide more information on the proposed well construction.
6. Elaborate on the following:
  - a. Page 2-2, paragraph starting with "Filter pack...", Specifies materials used in the annular space of the well from the bottom of the well through 3 feet from the surface. No discussion is included for the section from 3 feet below ground surface (bgs) to the surface other than the monument. Please include the discussion of the surface seal type and materials that are planned for use.



- b. Original well depths and screened intervals vs. proposed replacement wells? Is there a difference, and why?
  - c. The proposed screened interval for MW-101 is 15 feet, “to ensure that the groundwater table will always be within the screened length of the well so that light non-aqueous phase liquid (LNAPL) hydraulic oil, if present, can be detected”
  - d. It is unclear if LNAPL has been detected during previous monitoring events. If LNAPL is a concern, provide additional background information.
  - e. 15 feet seems excessive without more information. Has there ever been a 15ft groundwater table fluctuation? What is the max groundwater elevation seasonal difference at the Site? What is the average high/low?
7. Figure 2. Replacement Monitoring Wells and Sampling Locations. In addition to previous comments on necessary components of figures, Figure 2 shows a modified MSW boundary reflecting the removal of MSW during the IA. Without further clarification on the exact location, and rationale, of the boundary between the two (2) Sites; modifying the MSW boundary is adding an additional layer of confusion.

## **Section 2.2 Groundwater Monitoring and Sampling**

1. Clarify the number of sampling events planned after the new wells are installed. It is unclear if there will be two (2) post-IA monitoring event, or if this is remnant language from the pre-IA work plan.
2. Include a table identifying the key characteristics of the monitoring well network used and well details, well elevation, screened intervals, total well depths, latitude, and longitude of well location, well materials and diameter, etc.
3. Append boring and construction logs for the monitoring well network.

## **Section 2.3 Groundwater Monitoring**

1. Arrange list of wells by Boise Mill wells (up-gradient), wells within the boundary of MSW, and wells down-gradient of the MSW.
2. Ecology needs to be able to clearly understand how the data collected will facilitate our understanding of the Site. Examples: identify sentinel wells, Boise Mill wells with contaminants not present at the Yakima Landfill to justify off-site source, background, etc.
3. Identify how river gauge data will be used and its relationship to Site groundwater. It is not clear if it will be used in modeling of the groundwater potentiometric surfaces each season or if it is intended to be used as informational only.
4. Identify the wells that will be used to model the groundwater potentiometric surface. Confirm these wells are consistent with previous monitoring events. If not, include discussion and implications of change.



Bill Preston  
City of Yakima  
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### **Section 2.4 Groundwater Sampling**

1. Group and list the analytes within the text instead of paragraph form.
2. Provide additional discussion on justification for the removal of specific COPCs from the analytical program.
3. Incorporate comments from the discussion above on COPCs and PCULs.

### **Section 3.0 Reporting**

1. Revise references to previously developed Screening Levels to the current Preliminary Cleanup Levels (PCULs). The PCUL tables developed with Ecology Toxicologist Arthur Buchan have replaced, and supersede, the SL values in the Supplemental RI.

Sincerely,



Jennifer Lind  
Cleanup Project Manager  
Toxics Cleanup Program  
Central Regional Office

Enclosures: Ecology comments on Groundwater  
Ecology comments on Surface Water

cc: Piper Roelen, Landau Associates



Groundwater

**Ecology comments on drivepoint and downgradient wells:**  
 -MW-14 and MW-16 were only tested for HClID, As, Fe, Mn, and 1 quarter for benzo(b)fluoranthene.  
 -The drivepoint wells (DPW-1 and DPW-2) were only tested for metals and conventional parameters (TOC, TDS, ions, etc.).  
 Please make sure any sample locations/results used as justification for downgradient conditions are accurate.

These values are copy/pasted directly from the PCUL/COPC table (excluding the comparison criteria columns). The cells with red text have been edited by Landau.					Landau's Comments on Groundwater COPCs/PCULs	Ecology Response	Is the Contaminant a Boise Mill COPC for GW?			
Analyte	CAS	PCUL (ug/L)	Highest Value Detected (ug/L)	COPC ?	LAI Comments	LAI Conclusions/Recommendations	ECY Comments	ECY Conclusions/Recommendations	Boise Mill COPC?	Is there a concern that this COPC has been eliminated by both the Boise Mill and Landfill Sites, but it's still a problem?
Diesel + HO	x	5.00E+02	9.70E+02	Y	ONLY Landfill well detections above PCUL of TPH-D/O were at MW-106 (970 ug/L; 190 ug/L w/SGC) in Dec. 2014 RI sampling event; all subsequent events below 200 ug/L. (Also, potential source removed during Feb. 2021 IA petroleum contaminated soil remedial excavation).	Remove as COPC for GW (statistical)	Highest detected Value = 10,500 ug/L @ FPP-MW-1 6/2015 (this is an up-gradient Boise Mill well) Highest detected value at Landfill well = 970 ug/L @ MW-106 12/2014  -Highest concentration at MW-106 -MW-106 has decreasing concentrations of diesel/HO since the max, and no other detections have exceeded PCUL. -no other detections in Landfill on-site or down-gradient wells.	One more quarter of results. If ND or <PCUL, then remove.	Y	
Bis(2-Ethylhexyl)Phthalate	117-81-7	6.00E+00	8.10E+01	Y	Not detected in any wells except 4 Landfill wells in 2014 in 2 quarters: (only 1 well in Sept. 2014 [MW-8], and 4 wells in Dec. 2014 [MW-8, MW-102, MW-103, MW-106])	Remove as COPC for GW	Highest detected Value = 81 ug/L @ MW-106  -MW-14 and MW-16 were not tested for Bis(2-Ethylhexyl)Phthalate -Highest concentration at MW-106 -exceedances as several on-Site Landfill wells. -there have not been 4 clean quarters between exceedances	Keep as COPC for GW	N	
Chloroform	67-66-3	1.41E+01	2.20E+01	Y	Not detected in any Landfill wells, not a COPC in GW	Remove as COPC for GW	Highest detected Value = 22 ug/L @ MW-9A 2/2014 (this is an up-gradient Boise Mill well) Highest detected value at Landfill well = 0.57 ug/L @ MW-109 9/2014  -no detections at any other Landfill well -the single detection at MW-109 was significantly below the PCUL (14.1 ug/L) vs 0.57 ug/L	Remove as COPC for GW	N	Table 4 of the Boise Mill RI lists the highest detected value as 2.19 ug/L, and < the PCUL of 14 ug/L. Chloroform should be retained as a COPC for the Boise Mill Site since the highest detected value is 22 ug/L @ MW-9A 2/2014.
3,3'-Dichlorobenzidine	91-94-1	2.00E+00	1.30E+01	Y	Not detected in any Landfill wells except one detection at 13 ug/L at MW-15 in 1 quarter of RI (downgradient well; likely not from landfill site)	Remove as COPC for GW	Highest detected Value = 13 ug/L @ MW-15  -No detections at any well except for 1 quarter @ MW-15. There have been 4 quarters of non-detect since.	Remove as COPC for GW	N	
Vinyl Chloride	75-01-4	2.92E-01	3.90E-01	Y	Not detected in any Landfill wells except one detection at 0.39 ug/L at MW-106 in 1 quarter of RI	Remove as COPC for GW	Highest detected Value = 0.39 ug/L @ MW-106 12/2014  -Highest concentration at MW-106 -also detected 11/2020 at MW-106, but below PCUL (0.056 ug/L) -A few other detections, but no exceedances. -Need one more quarter of results	One more quarter of results. If ND or <PCUL, then remove.	N	It is unclear where/when the Boise Mill max detected concentration (0.015 ug/L) was collected.
Arsenic	7440-38-2	5.00E+00	9.70E+02	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in RI or 2020. Concentrations in Landfill wells are indicative of background	Keep as COPC for GW (drinking water), not as GW to SW (NO RELEASE - CONDITION RESULTING FROM REDUCING CONDITIONS)	*Note: the value entered in cell D14 by Landau is a mistake. Likely copy/pasted from Diesel/HO.  Highest detected Value = 17 ug/L @ FPP-MW-1 11/2020 (this is an up-gradient Boise Mill well) Highest detected value at Landfill well = 9.2 ug/L @ MW-106 11/2020  -Highest concentration at MW-106 -Many exceedances at Landfill wells *Disagree with opinion that concentratons are background. *Disagree with opinion that reducing conditions caused the problem, so there is no problem.	Keep as COPC for GW	Y	
Iron	7439-89-6	1.10E+04	5.60E+04	Y	Elevated iron concentrations in landfill wells	Keep as GW COPC, also GW to SW. (NO RELEASE - CONDITION RESULTING FROM REDUCING CONDITIONS)	*highest detected value = 57,000 ug/L @ MW-106 12/2014	Keep as COPC for GW	N	Iron should be added as a COPC for the Boise Mill Site.
Manganese	7439-96-5a	7.47E+02	5.70E+03	Y	Elevated iron concentrations in landfill wells	Keep as GW COPC, also GW to SW. (NO RELEASE - CONDITION RESULTING FROM REDUCING CONDITIONS)	*highest detected value = 5,700 ug/L @ MW-106 12/2014	Keep as COPC for GW	N	Manganese should be added as a COPC for the Boise Mill Site.

Surface Water

**Ecology comments on drivepoint and downgradient wells:**  
 -MW-14 and MW-16 were only tested for HClD, As, Fe, Mn, and 1 quarter for benzo(b)fluoranthene.  
 -The drivepoint wells (DPW-1 and DPW-2) were only tested for metals and conventional parameters (TOC, TDS, ions, etc.).  
 Please make sure any sample locations/results used as justification for downgradient conditions are accurate.

Landau's Comments on Surface Water COPCs/PCULs	Ecology Response	Is the Contaminant a Boise Mill COPC for SW?
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These values are copy/pasted directly from the PCUL/COPC table (excluding the comparison criteria columns). The cells with red text have been edited by Landau.

DG Wells = MW-14, MW-15, MW-16, MW-17  
 Shoreline Drivepoint Wells = DPW1, DPW-2

Analyte	CAS	PCUL (ug/L)	Highest Value Detected (ug/L)	COPC ?	LAI Comments	LAI Conclusions/Recommendations	ECY Comments	ECY Conclusions/Recommendations	Boise Mill COPC?	Is there a concern that this COPC has been eliminated by both the Boise Mill and Landfill Sites, but it's still a problem?
Diesel + HO	x	5.00E+02	9.70E+02	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in RI or 2020	Remove as COPC for GW to SW	Highest detected Value = 10,500 ug/L @ FPP-MW-1 6/2015 (this is an up-gradient Boise Mill well) Highest detected value at Landfill well = 970 ug/L @ MW-106 12/2014  -DPW-1 and DPW-2 were not tested for petroleum products -Highest concentration at MW-106 -MW-106 has decreasing concentrations of diesel/HO since the max, and no other detections have exceeded PCUL. -no other detections in Landfill on-site or down-gradient wells.	Remove as COPC for SW	Y	N
Bis(2-Ethylhexyl)Phthalate	117-81-7	3.00E+00	8.10E+01	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in RI or 2020	Remove as COPC for GW to SW	Highest detected Value = 81 ug/L @ MW-106  -MW-14 and MW-16 were not tested for Bis(2-Ethylhexyl)Phthalate -DPW-1 and DPW-2 were not tested for Bis(2-Ethylhexyl)Phthalate -Highest concentration at MW-106 -Exceed PCUL at MW-8 for 2 quarters in 2014. -MW-7, -15, -17 are non-detect for all sampling events Highest detected Value = 13 ug/L @ MW-15	Remove as COPC for SW	Y	N
3,3'-Dichlorobenzidine	91-94-1	2.00E+00	1.30E+01	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in 2020; one detection in at 13 ug/L in 1 quarter of RI at MW-15 (no other detections at MW-15 or ANY other monitoring well at the Site)	Remove as CPOC for GW to SW (contamination not from Site)	-MW-14 and MW-16 werenot tested for this analyte -DPW-1 and DPW-2 were not tested for this analyte -No detections at any well except for 1 quarter @ MW-15. There have been 4 quarters of non-detect since.	Remove as COPC for SW	N	N
N-Nitrosodiphenylamine	86-30-6	2.00E+00	5.80E+00	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in 2020; one detection at 2.1 ug/L in 1 quarter of RI at MW-17 (no detetions in MW-7, MW-8, MW-19, MW-105, MW-107, MW-108, MW-109)	Remove as COPC for GW to SW	Highest detected Value = 5.8 ug/L @ MW-106  -MW-14 and MW-16 were not tested for N-Nitrosodiphenylamine -DPW-1 and DPW-2 were not tested for N-Nitrosodiphenylamine -Highest concentration at MW-106 -The 2 wells directly down-gradient of MW-106 (MW-8 and MW-109) have never had a detection. -Exceed PCUL at down-gradient MW-17 for 1 quarter 6/2015 Highest detected Value = 0.94 ug/L @ MW-8 11/2020	Keep as COPC for SW	N	N
1,2,4-Trichlorobenzene	120-82-1	3.90E-02	9.40E-01	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in RI or 2020	Remove as COPC for GW to SW	-MW-14 and MW-16 were not tested for 1,2,4-Trichlorobenzene -DPW-1 and DPW-2 were not tested for -Highest concentration at MW-8 -The lab reporting limit for this analyte was consistantly higher than the SW PCUL. -Exceed PCUL at MW-7 for 1 quarter 9/2014 -There are no wells down-gradient of MW-7. Another well should be considered.	Keep as COPC for SW	N	N
Vinyl Chloride	75-01-4	6.00E-02	3.90E-01	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in RI or 2020	Remove as COPC for GW to SW	Highest detected Value = 0.39 ug/L @ MW-106 12/2014  -MW-14 and MW-16 were not tested for vinyl chloride -DPW-1 and DPW-2 were not tested for vinyl chloride -Highest concentration at MW-106 -also detected 11/2020 at MW-106, but below PCUL (0.056 ug/L) -A few other detections (MW-103, -106, -15), but no exceedances. -Need one more quarter of results	One more quarter of results. If ND or <PCUL, then remove.	N	N
Benzo(b)fluoranthene	205-99-2	2.00E-02	8.30E-02	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 (or any other Landfill Well) in RI; one detection at 0.083 ug/L in in 2020 at MW-15.	Remove as COPC for GW to SW (contamination not from Site)	Highest detected Value = 0.083 ug/L @ MW-15 11/2020  -MW-14 and MW-15 were not tested for Benzo(b)fluoranthene -DPW-1 and DPW-2 were not tested for Benzo(b)fluoranthene -Highest concentration at MW-15 -also detected 11/2020 at MW-7, but below PCUL (0.008 ug/L) -Disagree with opinion that from off-site source. Soil results from excavation show high concentrations (removed).	Keep as COPC for SW	N	N
Arsenic	7440-38-2	5.00E+00	9.70E+02	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in RI or 2020	Remove as COPC for GW to SW (keep for GW as drinking water)	*Note: the value entered in cell D15 by Landau is a mistake. Likely copy/pasted from Diesel/HO.  Highest detected Value = 17 ug/L @ FPP-MW-1 11/2020 (this is an up-gradient Boise Mill well) Highest detected value at Landfill well = 9.2 ug/L @ MW-106 11/2020  -Highest concentration at MW-106 -MW-106 has exceeded PCUL for all quarters sampled -down-gradient wells (MW-14, -15, -16, -17) have had detections, but none above PCUL. -Exceed PCUL at MW-7 for 1 quarter 11/2020 -There are no wells down-gradient of MW-7. Another well should be considered.	Keep as COPC for SW	Y	N
Iron	7439-89-6	1.00E+03	5.60E+04	Y	Yes. Source of surface water criteria for iron is EPA "Gold Book" (Quality Criteria for Water 1986, EPA 440/5-86-001, May 1, 1986), which indicates this values is based on "freshwater aquatic life" but does not identify specific risks or derivation of this value.	Keep as COPC for GW to SW? (IF GOLD BOOK VALUE APPLICABLE)	*highest detected value = 57,000 ug/L @ MW-106 12/2014  Yes, gold book is applicable.	Keep as COPC for SW	Y	N
Manganese	7439-96-5a	5.00E+01	5.70E+03	Y	Yes. Source of surface water criteria for manganese is Secondary MCL (color, taste, staining)	Keep as COPC for GW to SW? (IF SECONDARY MCL APPLICABLE)	*highest detected value = 5,700 ug/L @ MW-106 12/2014  Yes, secondary MCL is applicable.	Keep as COPC for SW	Y	N
Endosulfan II (beta)	33213-65-9	5.60E-02	6.80E-02	Y	Not in MW-14, MW-15, MW-16, MW-17, DPW-1 or DPW-2 in RI or 2020	Remove as COPC for GW to SW	Highest detected Value = 0.068 ug/L @ MW-103 3/2015  -MW-14 and MW-16 were not tested for Endosulfan II (beta) -DPW-1 and DPW-2 were not tested for Endosulfan II (beta) -Highest concentration at MW-103 -Several detections below PCULs in on-Site wells -down-gradient wells (MW-7 and MW-17) no detections -MW-15 had 1 detection below PCUL	Remove as COPC for SW	N	?