## 2018 Final Resolved Office of Inspector General Recommendations, EPA Corrective Actions and Target Completion Dates

The Office of Inspector General (OIG) report No. OPE-FY17-0019 titled, *Weaknesses in the EPA's Biosolids Program Threaten the Agency's Mission to Protect Health and the Environment* (November 15, 2018) listed OIG recommendations and EPA corrective actions. However, the EPA did not concur on five of the OIG recommendations listed in the final report. As a result, the OIG and the EPA Office of Water engaged in a resolution process. Resolution was reached July 25, 2019. All OIG recommendations and EPA corrective actions are listed in the following table.

No.	Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion Date
1	Utilizing existing tools and capabilities, implement a method or approach to better capture and analyze biosolids inspections data in the EPA's data system of record for any biosolids inspection activities that are conducted during the National Pollutant Discharge Elimination System permit inspections.	OECA already has a method to capture and analyze biosolids inspections in its system of record. OECA will include, as a part of its next annual reporting plan memo to the EPA Regional offices, a reminder to Regions to record any biosolids inspection that occurs as part of a larger facility inspection. The EPA will also remind the eight states authorized for the Federal biosolids program to share biosolids inspection data with the EPA NPDES data system (ICIS-NPDES). [1] Authorized NPDES programs are required to share these data with the EPA in a timely, accurate, complete, and consistent format (see Subpart C to 40 CFR part 127).	6/30/2019 (Completed)
2	Establish a nationally consistent and measurable goal for biosolids inspections and nationally consistent desk audit requirements that apply equally to the EPA and authorized states.	OECA agrees with the OIG and will issue a policy memo updating the 2014 CMS to incorporate protocols similar to the current practices of the Biosolids Center for Excellence. The revised policy will recognize the availability of new e-reporting technology and will affirmatively allow states that have the capacity to follow those same practices. We will also offer assistance to states that may want to adopt EPA's e-reporting tool prior to the 2020 deadline. For those states that do not have ICIS e-reporting or other data systems capable of reviewing 100% of the biosolids universe for noncompliance, we will outline the flexibilities offered in alternative plans.	3/31/2019 (Completed)

3	Complete development of the	OW is working to complete the screening tool	3/31/2023
	probabilistic risk assessment tool and	and probabilistic risk assessment framework	(Completed)
	screening tool for biosolids land	for biosolids land application scenarios. OW	
	application scenarios.	anticipates releasing the screening tool first,	
		followed by the probabilistic modeling	
		framework, after peer and public review.	
4	Develop and implement a plan to	OW will develop and implement a plan to	4/30/2023
	obtain the additional data needed to	obtain data needed to complete risk	(Completed)
	complete risk assessments and	assessments on the 352 identified pollutants	
	finalize safety determinations on the	found in biosolids. OW will prioritize	
	352 identified pollutants in biosolids	pollutants using the screening tool to	
	and promulgate regulations as	determine which pollutants warrant a more	
	needed.	refined (i.e., probabilistic) risk assessment and	
		take into consideration the 61 chemicals	
		identified as hazardous under other statutes	
	Campulate and multiple all fatures	as identified by the OIG.	12/21/2010
5	Complete and publish all future	OW is on target to publish the 2017 Biennial	12/31/2018 (Completed)
	biosolids biennial reviews, including the 2017 biennial review, prior to the	Review (i.e., literature search from January 2016 through December 2017) on time.	(Completed)
	next review required by the Clean	2016 through December 2017) on time.	
	Water Act.		
6	Publish guidance on the methods for	OW is working with the EPA Office of Research	3/31/2023
	the biosolids pathogen alternatives 3	and Development to update the 2003	(Completed)
	and 4.	Environmental Regulations and Technology	, ,
		Control of Pathogens and Vector Attraction in	
		Sewage Sludge document to include EPA	
		Methods 1680, 1681 and 1682.	
7	Issue guidance on what new	The OW is updating the biosolids website to	7/9/2020
	technologies are allowable options or	clarify existing information on the Pathogen	(Completed)
	alternatives for biosolids pathogen	Equivalency Committee's determinations on	
	reduction.	alternative technologies for pathogen	
		reduction. EPA does not agree with the	
		characterization of this recommendation as	
		necessary to correct a program deficiency but	
		does agree with the intent of the	
		recommendation to improve the Biosolids	
0	Issue undated and consistent	Program.* (Resolved July 25, 2019)	2/21/2022
8	Issue updated and consistent guidance on biosolids fecal coliform	OW is working with the EPA Office of Research and Development to update the 2003	3/31/2023 (Completed)
	sampling practices.	Environmental Regulations and Technology	(Completed)
	Jamping practices.	Control of Pathogens and Vector Attraction in	
		Sewage Sludge document.	
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<sup>•</sup> EPA Corrective Action revised during resolution process

	Change the website response to the	The EPA is in the process of revising the entire	7/9/2020
	question "Are biosolids safe?" to	EPA biosolids website in order to update and	(Completed)
	include that the EPA cannot make a	clarify information and ensure transparency.	
	determination on the safety of	This will include deleting the question "Are	
	biosolids because there are	biosolids safe?" Instead, the EPA will use	
	unregulated pollutants found in the	appropriate risk communication language	
	biosolids that still need to have risk	that will ensure that potential risk from	
1	assessments completed. This change	unregulated pollutants found in biosolids is	
	should stay in place until the EPA can	adequately communicated. • (Resolved July 25,	
	assess the risk of all unregulated	2019)	
	pollutants found in biosolids.		
10 I	Modify the EPA's website on biosolids	The EPA is in the process of revising the entire	7/9/2020
1	to: (a) identify unregulated pollutants	EPA biosolids website in order to update and	(Completed)
1	found in biosolids, (b) disclose	clarify information and ensure transparency.	
	biosolids data gaps, and (c) include	This includes identifying pollutants found in	
	descriptions of areas where more	biosolids, disclosing biosolids data gaps and	
l l	research is needed. These changes	addressing research areas. The EPA is	
	should stay in place until the EPA can	consolidating the information so that it is	
	assess the risk of all unregulated	more easily obtained. (Resolved July 25, 2019)	
	pollutants found in biosolids.#		
11	Determine whether the impact on the	The EPA will determine whether a general	9/30/2019
	safety and protect ion of human	disclaimer and a referral to the Agency's	(Completed)
	health justifies a requirement to	biosolids website on potential risk to human	
i	include a general disclaimer message	health from unregulated pollutants found in	
	on the biosolids labels and	biosolids is needed on biosolids labels and	
i	information sheets regarding	information sheets.* (Resolved July 25, 2019)	
l l	unregulated pollutants and a referral		
1	to the website for additional		
i	information.#		
12 (	Conduct regular biosolids training and	OW will continue convening monthly biosolids	12/31/2019
	conference calls or meetings for	calls with the EPA offices and regions,	(Completed)
l l	regional and state staff and	participating in expert meetings/workshops	
	wastewater treatment operators to	on biosolids, and attending meetings with	
i	improve consistency in rule	biosolids stakeholders. These current, ongoing	
i	interpretation and aid in knowledge	activities often include training specific to	
[ t	transfer.	biosolids science and management.	

<sup>•</sup> EPA Corrective Action revised during resolution process # OIG Recommendation revised during resolution process

13	In addition to EPA technical biosolids	In addition to conducting technical biosolids	7/9/2020
	trainings or conferences, include on	training or conferences, the EPA is in the	(Completed)
	the biosolids website general	process of revising the entire EPA biosolids	
	questions and answers the regions	website in order to update and clarify	
	and states have dealt with regarding	information and ensure transparency. This	
	biosolids to improve EPA knowledge	includes updating frequently asked questions	
	transfer to regional and state	and answers regions and states have	
	biosolids program managers as well	communicated to EPA on biosolids	
	as wastewater treatment plant	management. The technical, programmatic	
	operators.#	and policy-related information can be used to	
		assist EPA regions, states and biosolids	
		stakeholders. • (Resolved July 25, 2019)	

OIG Recommendation revised during resolution process
EPA Corrective Action revised during resolution process