

Deliverables Planner

EDOP reference	Activity	Deliverable	DZF Point of Contact	Submission contacts		Anticipated Deliverable	Anticipated Deadline	Anticipated Review Time	Comments
				CCoD Contact	CDPHE contact				
Overall EDOP	General updates made to EDOP as system is being developed and tested to reflect most accurate information.	<u>Memo with proposed amendments, using CDPHE EDOP Amendments and Modifications Cover Sheet.</u>	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	Larry Bruskin, Solid Waste Permitting Unit	Indefinitely over the life span of the system	TBD	TBD	
Section 11.2.1 (E) & 11.2.3 (A)	Request for external waste source acceptance.	Memo with proposed external waste source and request for approval. Include any impacts to system analyticals and other permit requirements	Paul Quick, Director of Special Projects	Justin Sterger, Environmental Public Health Analyst II Parks & Rec/TBD	Larry Bruskin, Solid Waste Permitting Unit	Indefinitely over the life span of the system		TBD	
Section 11.2.1 (F)	General permits associated with Waste to Energy system	Copy CCoD on all permit submissions related to the Waste to Energy system. This includes what is currently listed in 11.2.1 F, and any future permitting needs	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	TBD	Indefinitely over the life span of the system			
Current list of specific permit needs									
Section 11.2.1 (F)	Verification of water quality permits for condensate and glycol/water mixture	Meet with Metro Waste water to discuss project and waste water permitting needs, confirm coverage of Sewer Use Discharge Permit #200910118	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II		Start discussions as early as September 2014	Completed	TBD	DZF met with Metro Wastewater on September 11, 2014. Current SUDP permit covers condensate and extraction water from waste shredding process. DZF will be providing information to Metro on proposed gas clean-up system for regulatory analysis, once DZF has available process information to share. We discussed that this system is still under development.
	Industrial waste water permit	Begin process for submittal of industrial waste water permit associated with gas clean-up	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II Lori Maag Industrial Waste Supervisor Metro Wastewater Reclamation District	TBD	Start discussions as early as September 2014	All applicable permits issued by September 2015	TBD	Met with Metro on 9/4/2014 to discuss project. DZF to submit process information associated with gas clean-up system for initial determination on permitting and design needs.
	CDPHE Construction Air Permit	Draft permit	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	Michael Harris, Air Quality Division	Anticipate August 2014	Need final version for CD application by October 2014	30 day public comment period starting in August	
	Title V Permit	Submittal of Title V Operating Permit is due within one year of commencement of operation of any piece of equipment covered by this permit, whichever date is earliest.	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	Matt Burgett, Title V Permit Division	Anticipated commencement of operation of first piece of equipment January 2015	Application due January 2016	TBD (CDPHE review & public comment period)	
	Building-associated permitting	Various permit submissions to meet City and County of Denver Building Permit requirements (electrical, mechanical, plumbing, and fire suppression)	Paul Quick, Director of Special Projects	Justin Sterger, Environmental Public Health Analyst II City and County of Denver Building Permit Department		Varies as equipment begins to move in. Please reference master schedule.	Varies	Varies	Any submissions to building department, we will carbon copy Justin on all correspondence and information
Section 11.2.2 (B) 2	Glycol/Water tank secondary containment	Construction and engineering calculations for secondary containment around the glycol/water tanks	Paul Quick, Director of Special Projects	Justin Sterger, Environmental Public Health Analyst II		Anticipated start date of September 2014	February 2015	NA	Calculations will be provided and verified by Veradyn. We can get these out soon - Dustin to take a look at and put something together.

Deliverables Planner

EDOP reference	Activity	Deliverable	DZF Point of Contact	Submission contacts		Anticipated Deliverable	Anticipated Deadline	Anticipated Review Time	Comments
				CCoD Contact	CDPHE contact				
Section 11.2.3 (I) & 11.2.4 (A)	General operating procedures (all related to the CDPHE Construction Air Permit records and deliverables)	The operation, monitoring, maintenance, training, and startup/shutdown procedure documentation is required and will continue to be developed and submitted to CDPHE Air Pollution Control Division following the requirements listed in Other Solid Waste Incinerator (OSWI) subpart EEEE, specifically within the site documentation	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	TBD	Upon approval of construction permit, Anticipated date of October 2014	Varies	TBD	Keep in mind this will be modified and updated regularly as we continue to learn and develop our operational plan and test.
	Air Permit compliance plan/task list	Upon receipt of permit, DZF will be creating an internal compliance tracking document that addresses all deliverables and deadlines for the permit.	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	Michael Harris, Air Quality Division	Upon approval of construction permit, Anticipated date of October 2014	November 2014		Reference the Title V. requirements and include city in all corespondance with State/Epa
Section 11.2.3 (J) and (K)	Ash, tars and other byproducts sampling plan	A plan that outlines the specific details on how ash will be sampled during the testing and start-up phase of equipment #8-1, 8-2, 8-3. The plan will describe roles and responsibilities, training requirements, methodology, laboratory analysis and associated regulatory frameworks, frequency, reporting and assessment of results.	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	David Snapp, Recycling and Beneficial Use Other Dept/TBD	March 2015	May 2015	2 weeks	Gerald will be a critical piece of this to ensure that we have established and are following protocols and procedures.
	Creation of TENORMS and associated sampling plan	Memo documenting DZF's technical analysis confirming that this requirement is not applicable to our process.	Paul Quick, Director of Special Projects	Justin Sterger, Environmental Public Health Analyst II		August 18, 2014	September 1, 2014	2 weeks	Completed and sent to CCoD 9/8/2014
	Ash, tars and other byproducts sampling results and waste characterizations	Laboratory results, QA/QC data, chain of custody	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	David Snapp, Recycling and Beneficial Use Other Dept/TBD	Upon receipt of results			

Deliverables Planner

EDOP reference	Activity	Deliverable	DZF Point of Contact	Submission contacts		Anticipated Deliverable	Anticipated Deadline	Anticipated Review Time	Comments
				CCoD Contact	CDPHE contact				
	Waste management plan for ash, tars and other byproducts	This plan will outline the actions to be taken by DZF for management of ash (and other by products) and overall contingency strategies for determination as hazardous. We will discuss disposal, associated safety protocols, management and transportation of the wastes and strategies that will be implemented in order to mitigate generation of hazardous waste in support of our zero waste goals. In addition, DZF will discuss what regulatory actions need to be taken prior to a hazardous waste determination, to address potential changes to our generator status from conditionally exempt small quantity generator to either small or large quantity generator.	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	David Snapp, Recycling and Beneficial Use Other Dept/TBD	March 2015	May 2015	2 weeks	
Section 11.2.3 (N)	Fire Safety Monitoring Systems	Fire management procedures and associated final engineering report responding to the potential hazards identified in/above Equipment #5-1 and within Equipment #3-1.	Paul Quick, Director of Special Projects	Justin Sterger, Environmental Public Health Analyst II James 'JD' Lanz, P.E. Fire Protection Engineer		December 2014	January 2015	TBD	
Section 11.2.3 (O)	Closure Plan and Financial Assurance Plan	General updates to this section in the EDOP will be made as we continue with the design, fabrication and testing of the system. DZF will submit updates to this section using CDPHE EDOP modification form as described earlier. The Financial Assurance will also be updated per the regulations as new information becomes available designating a significant changes as defined in the 40 CFR 60	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	Larry Bruskin, Solid Waste Permitting Unit	Every five (5) years unless required by CDPHE or if new information/ changes to the operation impact the closure cost estimate	TBD	TBD	Replace original cost estimates with new cost estimates every five (5) years unless otherwise required by CDPHE or if new information/changes to the operation impact the closure cost estimate. A request to modify the closure plan will be submitted to CDPHE (copied to City), and the closure cost estimate will be revised no later than 30 days after DZF has received CDPHE and City approval
Section 11.2.4 (H)*	Nuisance complaint logs and associated records	All recorded nuisance complaints and associated corrective and preventative actions to respond to complaints	Paul Quick, Director of Special Projects	Justin Sterger, Environmental Public Health Analyst II	TBD	Indefinitely over the life span of the system			*This task should be reported both directions (i.e. CCoD should provide DZF with any records pertaining to complaints received in their offices)
Section 11.2.4 (J)	Monitoring, measurement and record keeping	Additionally, DZF will submit on an annual basis, specific records (to be defined between DZF and City), electronically, to City and County of Denver, taking into consideration any records that are Confidential Business Information of DZF	Jennifer Hale, Director of Safety and Sustainability	Justin Sterger, Environmental Public Health Analyst II	Larry Bruskin, Solid Waste Permitting Unit	Indefinitely over the life span of the system	Annual		Many requirements are defined within the permits as to what is required to be given. It makes more sense to just follow the requirements and include the city in the coorespondance/communcation as they request.