### standard operating procedure high risk — environment



# Water Management / Stormwater – Spring Farm Resource Recovery Park (SFRRP)

**SOP069** 

#### **Purpose and Scope**

The purpose of this procedure is to outline the key requirements for the management of stormwater at SFRRP. It includes:

- providing direction for the appropriate management of stormwater, surface water and groundwater on site
- Ensuring the risks of contamination of water systems are identified
- · Controlling and minimising the impact of rain and storm events on site

This procedure applies to all SUEZ facilities within SFRRP. \*Note – Management of Leachate is detailed in the Leachate Management SOP - SOP036.

#### **Key Hazards**



- Flooding
- Damage to land infrastructure and property
- Contamination of soil
- Personal injury
- Negative impact to surrounding ecosystems and environments Breach of licence conditions

#### KEY OPERATIONAL CONTROLS

detailed actions overleaf

Identification of environmental aspects and impacts through risk assessments of the effect of stormwater, surface water and ground water

Lawful disposal of effluent

Facilities designed to consider water pathways on site during, and post construction

Site drainage maps in place and understood by relevant workers

Ensure appropriate water diversion methods/controls are implemented

#### **Key Actions – General Information**



ITEM	ACTION	RESPONSIBILITY
1.	For the purposes of this document, water management is the activity of planning, developing and distributing the ideal use of water for facilities within SFRRP.	Site Manager / Site Supervisor
2.	Water activities within SFRRP facilities, must be managed in accordance to this SOP, to ensure the protection of the environment to minimise the potential impact of contaminated water, storm and rain events.	Site Manager / Site Supervisor
Respo	nsibilities	
3.	Where applicable, site managers and supervisors must ensure that:  The actions in this procedure are delegated, carried out and communicated to the relevant workers;	Site Manager / Site Supervisor
	All applicable licence conditions are followed in line with the sites     Environmental Protection Licence;	
	<ul> <li>All relevant workers are trained in this SOP and the site specific water management procedures (contained within the Environmental Management Plan);</li> </ul>	
	Environmental incidents are managed in accordance with the <i>Incident Reporting and Corrective Action Procedure</i>	
4.	Operations Manager (Operations Supervisor / Compliance Officer / Technical Supervisor / Technical Officer / Leading Hands – where applicable) must:  • Be trained in this SOP  • Undertake monitoring and reporting as required	Operations Manager / Other Relevant Workers
5.	Understand all applicable national, state or territory laws, environmental authority licences, ministerial conditions/directions and council/local government requirements that are applicable to the management water on SUEZ sites.	Site Manager / Compliance Officer
Inform	ation, Training & Instruction	
6.	Training in this SOP and the site EMP must be provided to all workers involved in the management and monitoring of water.	Site Manager
7.	Training records must be maintained in accordance with the <i>Induction, Training and Competency Procedure.</i>	Site Manager
Legal	& other Statutory Requirements	
8.	All facilities within SFRRP must manage stormwater in line with the applicable national, state or territory laws, environmental authority licences, ministerial conditions and council/local government requirements.	Site Manager



9.	Water generated from SUEZ operations must not impact the environment or community beyond the site boundary. Environmental Protection Licenses may outline site specific water management controls, monitoring and reporting requirements which must be adhered to.	Site Manager
Enviro	onmental Management Plan (EMP) PLANS004	
10.	Each SUEZ site that operates under an Environmental Protection Licence must develop and maintain a site specific EMP that must contain the following items:  Management Strategy  Site Infrastructure, plant and equipment  Sampling Equipment and Instructions  Monitoring Requirements (monitoring points, requirements – pollutant/frequency/method, sampling bottles  Other applicable statutory requirements relating to water management	Site Manager
Emer	gency Response	
11.	For emergencies on site relating to water, refer to the site specific <i>Emergency</i> Response Plan (PLANS003).	All workers

#### Key Actions - Water / Stormwater Management at SFRRP

ITEM	ACTION		RESPONSIBILITY
Storm			
12.	Stormwater management strategies and design criteria the following:  Ensure drainage systems are designed and master storms of any given frequency and severity (5 year, 20 events)  Erosion and sediment control is in place alon areas and stockpiles. This can include stormwater flow  Monitoring off site stormwater discharge.	nintained to accommodate for year and 100 year storm g drainage lines, disturbed	Site Manager
13.	Construct and maintain surface water diversion drains t prevent contact with waste.	o minimise stormwater and	Site Manager
14.	Segregate contaminated water from clean water.		Site Manager
15.	All stormwater that has come in contact with waste, is c tank farm for treatment.	aptured and taken to the liquid	Site Manager
16.	Stormwater runoff car parking, driveways and hard pav first flush system drains.	ed areas is diverted into the	Site Manager

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17.	Stormwater pits in yard areas must be clearly marked/labelled as Stormwater only.	Site Manager	
18.	All paint, solvent, petroleum, and petroleum waste products and storage containers must be stored so that these materials are not exposed to stormwater in accordance with the Site Maintenance SOP	Site Manager	
Storm	water pathways		
19.	Stormwater from the MRF & public drop off facility is captured via drains and filters through a vegetated channel down to the first then second on site stormwater dams. Dam levels are monitored and environmental testing is carried out quarterly and in the event of discharge occurring.	Site Manager Compliance Office	
	Stormwater from the closed landfill is also captured through the first and second onsite stormwater dams.		
	Stormwater from the ARRF & Organics facility is captured through a First Flush system. Tank levels are monitored and environmental testing is carried out quarterly.		
	Desilting of both stormwater dams and the First Flush tank was undertaken mid 2017.		
Water	sampling		
20.	Water sample collection from dams or large open bodies of water must be undertaken by two persons. Sampling equipment must be in good working order. Persons taking samples must have a two-way radio and mobile phone at all times when collecting samples. SOP070 to be followed. The person collecting the samples must be wearing a life jacket.  Sample retrieval from enclosed tank outlet valves can be undertaken by one person.	Compliance Office	
Was	h Bay Facilities		
21.	All wastewater generating activities must occur within designated areas that drain into trade waste systems or appropriate oil separation.	Site Manager	
22.	All bins, mechanical parts/equipment, and vehicles must be washed within bunded wash facility boundaries in accordance with the <i>Bund Construction and Maintenance</i> SOP.	All workers	
23.	Wash facilities must be managed in accordance with the Wash Facility and Use SOP and must be regularly inspected using the appropriate Monitoring Checklist (FORM026).	All workers	
Mair	ntenance & Operation		
24.	Surface water diversion drains must be maintained in good working condition to minimise stormwater build up and prevent contact with waste.	Site Manager / Supervisor	
25.	Monitor the quality of water storage and discharge ponds/areas in accordance with site requirements. Refer to licence agreements, EMP and trade waste agreement.	Site Manager / Supervisor	
26.	Check and clear drains prior to water pooling on a regular basis using appropriate tools to prevent water pooling.	Site Manager / Supervisor	
27.	Provide and operate pumps to transport water around the site where required	Site Manager / Supervisor	



28.	Do not allow contaminated water to flow into clean water. If contamination occurs, do not discharge the water into the environment unless it be can be demonstrated that there was no unacceptable impact on the receiving waterways. <b>Note</b> – confirmation or authorisation by relevant state authorities may be required prior do discharge.	Site Manager / Supervisor
29.	Following a rain event, review stormwater dams capacity and determine if it is adequate.	Site Manager / Supervisor

#### **Definitions**

#### **Related Documents**

DOCUMENT NAME	REFERENCE NUMBER
Environmental Management Plan PLANS004	PLANS004
Leachate Management SOP036	SOP036
Emergency Response Plan PLANS003	PLANS003
Wash bay Checklist FORM026	FORM026
Bund Construction and Maintenance SOP078	SOP078
Site Maintenance – Infrastructure Facilities SOP041	SOP041
Incident Reporting and Corrective Action Procedure PROC008	PROC008
Wash Facility Use and Maintenance SOP002	SOP002
Working near water	SOP070
Water Management Act 2000 (NSW)	
Protection of the Environment Act	

#### **Review and Document Control**

VERSION	CHANGE	REVIEWED	AUTHORISED	DATE ISSUED
1	Initial issue	K.Gee. J. Mak	Nat EQS Coordinator	23/07/19
2	Review document, no changes required.	Mgahl Eather	Site Manager	24/09/2020

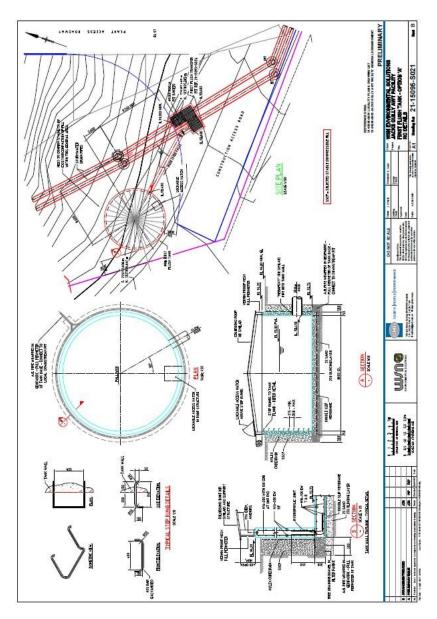
**Commented [GK1]:** Note: no updates required, just a review date to show document has been reviewed.

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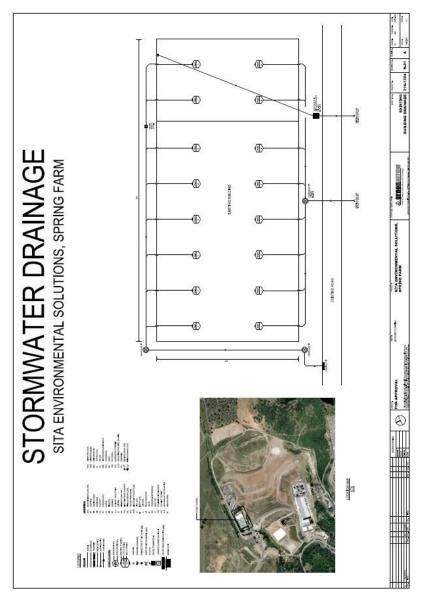
APPENDIX 1 First Flush Diagram





APPENDIX 2 MRF Drainage Plan





APPENDIX 3 Stormwater Dams 1 & 2



