



# **Expansion of Hong Kong International Airport into a Three-Runway System**

Spill Response Plan

September 2025

Mott MacDonald  
3/F Manulife Place  
348 Kwun Tong Road  
Kwun Tong  
Kowloon  
Hong Kong

T +852 2828 5757  
mottmac.hk

# **Expansion of Hong Kong International Airport into a Three-Runway System**

Spill Response Plan

September 2025

**This Spill Response Plan has been reviewed and certified by  
the Environmental Team Leader (ETL) in accordance with  
Condition 1.9 and 2.16 of Environmental Permit No. EP-489/2014.**

**Certified by:**



---

Terence Kong  
Environmental Team Leader (ETL)  
Mott MacDonald Hong Kong Limited

Date                      19 September 2025



AECOM +852 3922 9000 tel  
8/F, Grand Central Plaza, Tower 2, +852 2317 7609 fax  
138 Shatin Rural Committee Road,  
Shatin, Hong Kong  
香港新界沙田鄉事會路 138 號新城  
市中央廣場第 2 座 8 樓  
www.aecom.com

Our Ref : 60440482/C/RMKY250922

By Email

Airport Authority Hong Kong  
HKIA Tower, 1 Sky Plaza Road  
Hong Kong International Airport  
Lantau, Hong Kong

Attn: Mr. Lawrence Tsui, Principal Manager, Environmental Compliance

22 September 2025

Dear Sir,

**Contract No. 3102**  
**3RS Independent Environmental Checker Consultancy Services**

**Spill Response Plan**

Reference is made to the Environmental Team's submission of Spill Response Plan under Condition 2.16 of the Environmental Permit No. EP-489/2014 and certified by ET Leader on 19 September 2025.

We would like to inform you that we have no comment on the captioned plan. Therefore we write to verify the captioned submission in accordance with the requirement stipulated in Condition 1.9 of EP-489/2014.

Should you have any query, please feel free to contact the undersigned at 37290380.

Yours faithfully,  
AECOM Asia Co. Ltd.

Roy Man  
Independent Environmental Checker

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Background	1
1.2	Project Description	1
1.3	Purpose and Scope	1
1.3.1	Construction Phase SRP	1
1.3.2	Operational Phase SRP	2
1.4	Report Structure	2
<b>2</b>	<b>Roles and Responsibilities during Construction Phase</b>	<b>3</b>
2.1	General	3
2.2	Overall Spill Response Arrangements	3
2.3	Emergency Team Personnel	3
2.3.1	Emergency Team Leader	3
2.3.2	Emergency Team	4
2.3.3	Onsite Workers	4
<b>3</b>	<b>Types of Spills during Construction Phase</b>	<b>5</b>
3.1	Key Types of Spills	5
3.1.1	Land-based Spills from Land-based Activities	5
3.1.2	Marine Spills from Marine-based Activities	5
<b>4</b>	<b>Construction Phase Spill Prevention Measures</b>	<b>6</b>
4.1	General Precautions	6
4.2	Construction Materials	6
4.3	Chemicals, Oils and Fuels	7
<b>5</b>	<b>Construction Phase Spill Response Procedures</b>	<b>9</b>
5.1	General	9
5.2	Construction Phase Spill Response	9
5.2.1	Oil or Hazardous Chemicals Spill on Land or on Deck of Marine Vessel	9
5.2.2	Oil or Hazardous Chemicals Spill into Marine Environment	10
5.2.3	Suspended Solids (SS) Spill into Marine Environment	13
5.3	Dolphin Contingency Plan	13
5.4	Sensitive Receivers	14
5.5	Neighbouring Residents	14
<b>6</b>	<b>Construction Phase Spill Response Plan Implementation</b>	<b>15</b>
6.1	Training	15

6.2	Spill Control Equipment	15
6.3	Drills	16
6.4	Spillage Incident Report	16
6.5	Information and Record Keeping	16
6.6	Review and Update of the SRP	17
<b>7</b>	<b>Relevant Parties Contact List during Construction Phase</b>	<b>18</b>
7.1	Emergency Contacts	18
<b>8</b>	<b>Operational Phase Spill Prevention and Response</b>	<b>19</b>
8.1	General	19
8.1.1	Airport Operations Manual (AOM)	19
8.1.2	Emergency Procedures Manual (EPM)	19
8.2	Roles and Responsibilities	20
8.3	Types of Spills	20
8.4	Spill Prevention Measures	20
8.4.1	Aircraft Fuelling	20
8.4.2	Other Chemicals, Oils and Fuels	20
8.5	Spill Response Procedures	20
8.5.1	Fuel Spillage from an Aircraft	20
8.5.2	Other Fuel / Chemical Spills	21
8.5.3	Chinese White Dolphins and other Marine Ecology Sensitive Receivers	21
8.5.4	Neighbouring Residents	22
8.6	Spill Control Equipment	22
8.7	Training and Incident Recording	22
8.7.1	Spill Response Training	22
8.7.2	Spillage Incident Recording	22
8.8	Periodic Environmental Audit	23
8.9	Emergency Contacts	23

## Tables

Table 3.1: Key Types of Spills that May Arise due to Construction of 3RS Project	5
Table 6.1: Spill Related Training Topics	15
Table 7.1: Project / Environmental Team's Contact List	18
Table 7.2: Contractor's Emergency Team Contact List	18
Table 7.3: Government Department Contact List	18
Table 7.4: Utility Company Contact List	18

## Figures

Figure 5.1: Overall Oil / Hazardous Chemicals Spill Response Procedure	12
--	----

Figure 8.1: Summary of Spillage Incident Response	21
---	----

## Appendices

A. Requirements for Contract-specific Spill Response Plans during Construction Phase	24
B. Overview of Part E – Section 5 Aviation Fuel Supply System of Airport Operations Manual (AOM) and Part 4A – Fuel Emergency Procedures Manual (EPM)	26

# 1 Introduction

## 1.1 Background

Under the Environmental Impact Assessment Ordinance, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) prepared for the “Expansion of Hong Kong International Airport into a Three-Runway System” (the project) has been approved by the Environmental Protection Department (EPD), and an Environmental Permit (Permit No.: EP-489/2014) has been issued for the project. Pursuant to Condition 2.16 of the Environmental Permit (EP), the Airport Authority Hong Kong (AAHK) shall prepare a Spill Response Plan (SRP) to handling any spillage incidents related to the project.

Mott MacDonald Hong Kong Limited (MMHK) was appointed by AAHK to provide environmental consultancy services to establish a SRP for actions to be taken to protect water quality and marine ecology in the event of accidental spillages associated with the project.

The new North Runway was commissioned in November 2022. At that time, the Interim Two Runway System (I-2RS) Stage was the mode of operation, in which the new North Runway and the associated taxiways and facilities were operated together with the South Runway and existing airport facilities, with the Centre Runway closed down for reconfiguration works. The reconfiguration works included releveling of the runway pavement to tie in with connecting taxiways, constructing new runway entry and exit taxiways, building new wrap-around taxiways at both ends of the runway. With the completion of the reconfiguration works, the flight check and aircraft crash and rescue exercise were also completed on the Centre Runway in September and October 2024 respectively. Thereafter, the Three-runway System (3RS) was commissioned on 28 November 2024.

This SRP presents the relevant arrangement for the construction phase of the 3RS Project as well as during the I-2RS and 3RS operations.

## 1.2 Project Description

This project covers the expansion of the existing airport into 3RS with key project components comprising land formation of about 650 ha and all associated facilities and infrastructure including taxiways, aprons, aircraft stands, a passenger concourse, an expanded Terminal 2, a new Automated People Mover (APM) system, a new Baggage Handling System (BHS), all related airside and landside works and associated ancillary and supporting facilities.

## 1.3 Purpose and Scope

As specified in Condition 2.16 of the EP:

*“The Permit Holder shall, no later than 3 months before the commencement of construction of the Project, deposit 3 hard copies and 1 electronic copy of a Spill Response Plan (the Plan) detailing the actions to be taken in the event of accidental spillage of oil, unexpected release of large amount of suspended solids or other hazardous chemicals during the construction and operation of the Project, with the Director. The Plan shall include vessels operating for the Project, with specific provisions for protecting water quality and marine ecology as well as for the neighbouring residents.”*

### 1.3.1 Construction Phase SRP

The construction phase SRP, presented in Sections 2 to 7, details the arrangements for effective emergency preparedness and response to spillage incidents during the 3RS Project construction



phase for implementation by all Contractors under the 3RS Project, and has been prepared in accordance with the EP requirements. In addition to fulfilling the EP requirements, this Plan also serves to provide the guidelines for setup of contract-specific SRPs by individual Contractors. In particular, this Plan covers the following:

- The requirements for the Emergency Team to be set up by each Contractor;
- The types of spills that may arise due to project activities;
- The requirements for spill prevention measures to be implemented;
- The procedures to be followed for timely and effective responses to different types of spillage incidents;
- The requirements for spill clean up and reporting;
- Specific measures to protect sensitive receivers from adverse impacts due to spills;
- The requirements for spill response training and spill response equipment; and
- A contact list of relevant parties to be notified in the event of spills.

### 1.3.2 Operational Phase SRP

Regarding the I-2RS and 3RS operational phases, the arrangements for effective emergency preparedness and response to spillage incidents are covered separately in **Section 8**.

## 1.4 Report Structure

Following this introductory section, this SRP is structured as follows:

### Construction Phase SRP

Section 2	Roles and Responsibilities during Construction Phase
Section 3	Types of Spills during Construction Phase
Section 4	Construction Phase Spill Prevention Measures
Section 5	Construction Phase Spill Response Procedures
Section 6	Construction Phase Spill Response Plan Implementation
Section 7	Relevant Parties Contact List during Construction Phase

### Operational Phase SRP

Section 8	Operational Phase Spill Prevention and Response
-----------	---

## 2 Roles and Responsibilities during Construction Phase

### 2.1 General

Prevention and spill response actions are the responsibility of Contractors operating in each construction works area. Proposed organisation arrangements for Contractors and the responsibilities of their key personnel during an emergency spill response event are described in this section.

### 2.2 Overall Spill Response Arrangements

AAHK as the project proponent and EP holder assumes overall responsibility for the project. In accordance with EP Conditions 2.2 and 2.3, AAHK will employ a full time on-site Environmental Team (ET) and Independent Environmental Checker (IEC) to implement and verify the environmental monitoring and auditing (EM&A) programme and performance respectively. This SRP details the general arrangements and expectations for spill response preparedness for the 3RS Project. During the 3RS construction phase, the responsibility for spill response is delegated by AAHK to individual Contractors undertaking the various construction works packages. Contractors are required to develop their own individual SRPs based on the specific nature of their works making reference to the general requirements and arrangements specified in this Plan. The ET, acting on AAHK's behalf, has the role of checking that individual Contractors develop contract-specific SRPs in accordance with the general and specific requirements, including certifying the contract-specific SRPs and thereafter will ensure that plans are properly implemented as part of the EM&A programme. The IEC has the role of verifying each contract-specific SRP and thereafter auditing the implementation of the contract-specific SRPs as part of the EM&A programme. Under this SRP and any contract-specific SRPs, the central contact of AAHK takes the responsibility for correspondence with relevant Government Departments in the event of handling all kinds of emergency spillage incidents.

### 2.3 Emergency Team Personnel

The general requirements of the Emergency Team to be provided by each Contractor are presented below. Each Contractor is required to prepare a contract-specific SRP and establish their own Emergency / Spill Response Team, with details to be included in their individual plans. Individual Contractors shall prepare their contract-specific SRP based on the general requirements specified in this Plan, with further details set out in **Appendix A**.

#### 2.3.1 Emergency Team Leader

The Contractors shall designate an Emergency Team Leader, whom shall be a person of sufficient authority with direct responsibilities for the contracted works of the Contractors under 3RS project (such as a Project / Site Manager). The Emergency Team Leader's main responsibilities should include the following:

- Ensure the contract-specific SRP is issued and followed by all construction workers of the project.
- Ensure that all construction workers perform their tasks and duties safely and correctly with sufficient resources.
- Direct the Emergency Team during any spill event.
- Maintain communication with AAHK and other relevant external parties in the event of spill as mentioned in this SRP.

### 2.3.2 Emergency Team

The Emergency Team shall comprise appropriate personnel (such as Safety Manager, Environmental Manager and/or Environmental Officer) to coordinate, monitor and oversee the implementation and performance of the SRP and shall assist the Emergency Team Leader when any spills occur. The Emergency Team shall liaise with the ET / IEC via the communication channels established by AAHK for the 3RS project. The Emergency Team shall ensure that all construction workers follow the requirements of the contract-specific SRP and shall provide related spill prevention and response training to all construction workers. The Emergency Team shall conduct a spillage incident / accident investigation when required, and shall review and update the SRP on a regular basis.

The Contractors shall provide full details of the individual personnel comprising their Emergency Team, including individual roles, responsibilities, lines of communication and an organisation chart in their contract-specific SRP.

### 2.3.3 Onsite Workers

All onsite construction workers are responsible for complying with the SRP and following the instructions of the Emergency Team. All workers are required to attend training provided by the Emergency Team to ensure construction materials, chemicals and wastes are handled and stored properly onsite as required by the EIA Report and the SRP. Workers are required to implement any remedial actions or environmental protection measures as directed by the Emergency Team, with proper use of the spill kits to collect and store the spillage wastes generated during clean up of any spills where applicable. Workers are also responsible for reporting immediately to the Emergency Team any incidences that occurred during the site works.

## 3 Types of Spills during Construction Phase

### 3.1 Key Types of Spills

Based on the construction phase activities associated with the 3RS project, the key types of spills that might arise due to the project are summarised in **Table 3.1**.

**Table 3.1: Key Types of Spills that May Arise due to Construction of 3RS Project**

Spill Types	Construction Phase	
	Land-based Activities	Marine-based Activities
Fuel / oil	✓	n/a
Chemicals	✓	n/a
Fill materials	n/a	n/a

Further details of these different types of spills are presented below.

#### 3.1.1 Land-based Spills from Land-based Activities

The main types of the spills that may arise from land-based activities are spillage of fuel / oil and chemicals.

Fuels / oils used during operation of powered mechanical equipment or stored onsite may be accidentally spilled due to poor handling practices or when insufficient safeguards are provided. While land-based spills are likely to be confined to the immediate area of the spill, the spill may seep into nearby stormwater drains and discharge into the marine environment if not responded to immediately.

Chemicals used during construction phase include construction materials such as bentonite and cement, finishing materials such as paints and coatings, and plant maintenance chemicals such as lubricants and solvents. Similar to fuel / oil spills, spillage of chemicals is likely to be confined to the immediate area of the spill, but may seep into nearby stormwater drains and discharge into the marine environment if not responded to immediately.

For fill materials used during construction phase, only accidental spillage into the marine environment would be identified as a potential concern.

#### 3.1.2 Marine Spills from Marine-based Activities

The main types of the spills that may arise from marine activities are spillage of fuel / oil, chemicals and construction fill materials.

Similar to land-based activities, fuel / oil and chemicals may be stored onboard construction / working vessels and can be accidentally spilled due to poor handling practices or when insufficient safeguards are provided against unforeseen events such as vessel collision. Any spills into the marine environment can form a large plume quickly due to wave and current action unless it is isolated quickly.

Spillage of construction fill materials may arise during transport of the materials to the construction area, and during filling activities for land formation. Spillage of fill materials can form large sediment plumes due to wave and current action unless it is isolated quickly.

## 4 Construction Phase Spill Prevention Measures

### 4.1 General Precautions

The following general precautionary measures shall be applied to all construction works areas to minimise the risk of accidental spillage:

- Maintain good site housekeeping practices and ensure all materials, chemicals and wastes are properly stored and placed in appropriate disposal areas onsite at the end of each day.
- Avoid disorder and storage of unnecessary materials in working areas.
- Open flames and smoking shall be prohibited within the construction site; smoking may be permitted only at designated smoking areas.
- Stacked containers should be secured from falling.
- Large / heavy containers should be stored on the floor as far as possible to prevent falling.
- Warning signs, fences and locks where appropriate should be deployed for storage place of hazardous materials, chemicals, fuel and oil, etc.

### 4.2 Construction Materials

Unexpected release of large amounts of suspended solids, in case of accidents, human negligence or mechanical failure would result in adverse water quality and marine ecology impacts. Hence, precaution and prevention measures are required to minimise the risk of such accidental spillages. The following measures shall be applied to all construction vessels involving transport of materials that may give rise to unexpected release of large amounts of suspended solids:

Prior to transport of fill materials;

- Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material.
- Vessels shall be regularly inspected to ensure no leakages and any leakages shall be repaired quickly prior to mobilisation of the vessels.
- Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation.
- Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved.
- Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action.

During transport;

- Vessels shall follow the pre-defined routes and marine traffic arrangements to minimise the risk of collision.
- Vessels shall follow the designated entry / exit points into and out of the construction site boundary.

- Vessel speeds shall be limited to 10 knots or less within the construction works area and hotspots of the Chinese White Dolphins (CWDs).
- Transits of vessels operating within the construction works areas will be monitored and managed by a Marine Traffic Monitoring System (MTMS) associated with a 24-hour On-shore Control Room, which will be established by AAHK for the project. Details of this MTMS have been stipulated in the separate Marine Travel Routes and Management Plan for Construction and Associated Vessels pursuant to EP Condition 2.9.

During filling activities for the land formation works;

- Pipes and fittings connecting the barges with the spreaders shall be properly fitted and checked for leakages / loose fittings prior to transferring any fill materials.
- Pipes shall be sized according to the required pumping rates and the pumping rates shall not exceed the pressure limits of the pipes / connections.

### 4.3 Chemicals, Oils and Fuels

For chemicals, oils and fuels required and used onsite, the following measures shall be applied:

For procurement;

- Label all chemical storage containers and tanks in accordance with the EPD 'Code of Practice on the Package, Labelling and Storage of Chemical Wastes'.
- An up to date list of chemicals, chemical waste and fuel oil should be maintained.

For storage;

- Suitable containers should be used which are resistant to the stored oil fuel, chemical / chemical waste to avoid leakage.
- Containers should be checked before use and container lids should be closed tightly to avoid leakage of chemicals and chemical waste.
- Chemical waste storage areas should be located in a designated area that is sheltered on at least 3 sides and the top, and is locked and kept clean and free from obstruction.
- Incompatible chemicals should be separated.
- Chemical, oil and fuel containers should be kept under eye level as far as possible.
- Drip trays or bunds should be used for storage containers of chemicals and oil / fuel tanks and should have a capacity equal to 110 % of the storage capacity of the largest tank.
- Chemical storage area and drip trays should be inspected daily to ensure the containers are in good condition and there are no openings which oil / chemicals can possibly leak out. Any damage / openings to the storage area and drip trays should be repaired or replaced immediately.
- Where chemicals are temporarily taken outside the sheltered chemical storage area, the chemicals including the drip trays / bund should be covered by waterproof tarpaulins and kept free of rainwater.

For transfer / transport;

- Pumps should be used to transfer large quantities of oil, fuel, chemical / chemical wastes instead of pouring.
- Oil, fuel, chemical / chemical wastes should be transferred slowly to prevent spill or overfilling.

- Suitable trolley should be used to transport chemicals / chemical wastes to other location.

For use;

- Chemical quantities / dosage required during each use shall be carefully calculated / measured to prevent any excess chemicals being generated and released.
- Drilling fluid used in drilling activities should be reconditioned and reused as far as possible.

## 5 Construction Phase Spill Response Procedures

### 5.1 General

In the event of a spillage incident, the spill response needs to be carried out promptly and efficiently according to the spillage location, type of spill and quantity of spill. An effective spill response can prevent adverse impacts to the environment and may also minimize the quantity of release into the environment. The spill responses for different types of spill and scenarios during construction phase are discussed in the following sections.

### 5.2 Construction Phase Spill Response

When a spill occurs, the individual identifying the spill shall inform the Emergency Team to proceed with the appropriate spill response immediately. The individual shall report the following to the Emergency Team:

- The location of the spill;
- Nature of the affected location (e.g. concrete, dirt, marine environment);
- When the spill occurred;
- The type of spill (e.g. oil, chemical, hazardous materials, suspended solid); and
- The approximate quantity and size of the spill.

For chemicals and hazardous materials, the name of the chemical / hazardous material should also be identified and reported immediately as part of the emergency communication. After receiving the description of the spill from the workers, the Emergency Team shall proceed with the appropriate spill response according to the relevant scenario described below.

#### 5.2.1 Oil or Hazardous Chemicals Spill on Land or on Deck of Marine Vessel

##### Immediate response

1. Workers shall take immediate measures (in line with spill response training) to stop the source of the spill if the source is obvious and it is safe to do so, and inform the Emergency Team of the spill incident.
2. Emergency Team Leader / Members shall organize the manpower to identify / check the source of the spill and provide instructions for stopping / containing the spill.
3. Workers shall stop, reduce, isolate or contain the spill if possible measures can be taken (e.g. turn off the valve).
4. In parallel, the Emergency Team Leader shall inform all relevant parties such as AAHK, ET and IEC immediately and keep such parties informed throughout the spill response.
5. If the spill spreads to an area larger than 100m<sup>2</sup>, the Emergency Team Leader shall also inform all relevant authorities such as EPD and Fire Services Department (FSD) immediately, and keep such parties informed throughout the spill response.

##### Spill response (for spillage area less than 100m<sup>2</sup>)

6. Workers shall install forced ventilation to ensure a safe spill response condition is provided, where applicable.
7. Emergency Team shall appoint well-trained clean up crew to clean up the spillage area.



8. Emergency Team shall review relevant Material Safety Data Sheet (MSDS) for the chemical spill. The MSDS would have specific instruction on how to deal with chemical spill.
9. Emergency Team shall ensure all the workers involved in the clean up works are equipped with suitable personal protective equipment (PPE).
10. The spilt material shall be put back into the containers of origin if possible and practical. Otherwise, dry sand, sawdust or other suitable materials shall be used to absorb the spill.
11. Any contaminated materials shall be collected, bagged and clearly marked as "Chemical Waste".
12. All collected chemical waste shall be stored in a designated chemical waste area and handled and disposed of in accordance with the Waste Disposal (Chemical Waste) Regulations.
13. Emergency Team shall carry out spill investigation and complete the spillage incident report.

#### Spill response (for spillage area greater than 100m<sup>2</sup>)

1. Follow item nos. 6 to 12 of the procedures for spill responses for spillage area less than 100m<sup>2</sup>
2. The ET and Emergency Team shall carry out joint spill investigation and complete the spillage incident report with provisions for improvement measures / practices to prevent re-occurrence and update this SRP if necessary. The improvement and prevention measures/practices should be recommended to AAHK. Site staff shall be briefed of these measures by the Emergency Team after the investigation.

### **5.2.2 Oil or Hazardous Chemicals Spill into Marine Environment**

When oil or other hazardous materials are spilt into the marine environment, the spill could be spread out quickly due to water current. Therefore, a timely and effective spill response shall be implemented in order to minimize the impacts to the marine environment.

#### Immediate response

1. Workers shall take immediate measures (in line with spill response training) to stop the source of the spill if the source is obvious and it is safe to do so, and inform the Emergency Team of the spillage incident.
2. Emergency Team Leader / Members shall organize the manpower to identify / check the source of the spill and provide instructions for stopping / containing the spill.
3. Workers shall stop, reduce, isolate or contain the spill if possible measures can be taken (e.g. deploy containment booms).
4. In parallel, the Emergency Team Leader shall inform all relevant parties such as AAHK, ET and IEC immediately and keep such parties informed throughout the spill response.
5. If the spill spreads to an area larger than 100m<sup>2</sup>, the Emergency Team Leader shall also inform all relevant authorities such as EPD, Marine Department (MD), Agriculture Fisheries and Conservation Department (AFCD), and FSD immediately, and keep such parties informed throughout the spill response.

#### Spill response (for spillage area less than 100m<sup>2</sup>)

6. Emergency Team shall appoint well-trained clean up crew to clean up the spillage area.
7. Emergency Team shall ensure all the workers involved in the clean up works are equipped with suitable PPE.
8. Absorbent materials such as pads or pillow shall be used to absorb the spill.
9. Any contaminated materials shall be collected and put in a spill containment and clearly marked as "Chemical Waste".
10. All collected chemical waste shall be stored in designated chemical waste area and handled and disposed of in accordance with the Waste Disposal (Chemical Waste) Regulations.

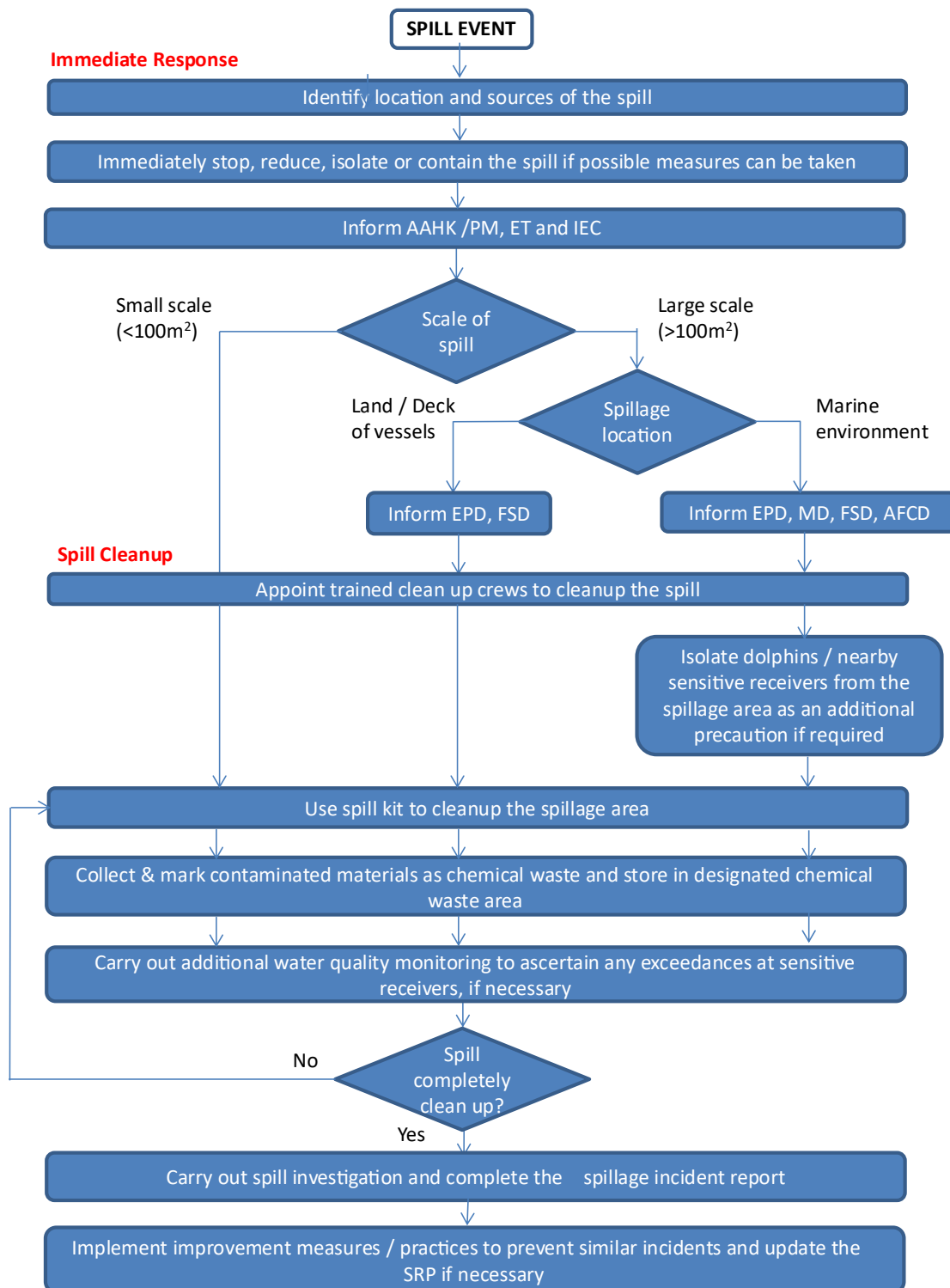
11. The ET shall review whether additional water quality monitoring is necessary to ascertain whether the spill has resulted in any exceedances at nearby sensitive receivers.
12. Emergency Team shall carry out spill investigation and complete the spillage incident report with provision of improvement and prevention measures recommended to AAHK. Site staff shall be briefed of these measures by the Emergency Team after the investigation.

Spill response (for spillage area greater than 100m<sup>2</sup>)

1. Follow item nos. 6 to 11 of the procedures for spill responses for spillage area less than 100m<sup>2</sup>.
2. Implement the specific dolphin contingency as per **Section 5.3** and the procedures for protection of sensitive receivers as per **Section 5.4**;
3. The ET and Emergency Team shall carry out joint spill investigation and complete the spillage incident report with provisions for improvement measures / practices to prevent re-occurrence and update this SRP if necessary. The improvement and prevention measures/ practices should be recommended to AAHK. Site staff shall be briefed of these measures by the Emergency Team and such measures shall be included in future drills and exercise; and
4. A report of the spillage incident, including the investigation report and recommended improvement measures should be provided to EPD.

The overall process for oil and hazardous chemicals spill procedures is presented in **Figure 5.1**.

**Figure 5.1: Overall Oil / Hazardous Chemicals Spill Response Procedure**



### 5.2.3 Suspended Solids (SS) Spill into Marine Environment

According to the EIA Report, with the implementation of the required mitigation measures for SS release (which includes using non-dredge construction methods, deployment of silt curtains, control of fines content and production rates, etc.) the potential for adverse water quality impact due to SS release during construction phase is considered to be insignificant.

Nevertheless, if a large amount (>10% of the storage capacity of the vessel) of sand / public fill material is unexpectedly released into the marine environment during transport of the materials outside the construction site boundary, the individual identifying the spill shall inform the Emergency Team to proceed with the appropriate spill response immediately as follows:

1. Emergency Team shall take immediate measures (in line with spill response training) to stop the source of the spill if the source is obvious and it is safe to do so.
2. Emergency Team Leader shall inform all relevant parties such as EPD, AAHK, ET and IEC immediately and keep such parties informed throughout the spill response.
3. Emergency Team Leader shall provide all details of the spill to the ET.
4. The ET shall undertake a rapid spill evaluation to identify (based on spill location, quantity, type of material, tidal conditions and proximity to sensitive receivers) whether any sensitive receivers are immediately at risk from the SS release, and recommend appropriate mitigation measures (e.g. deployment of temporary silt curtains at sensitive receiver locations) to AAHK and IEC accordingly.
5. The Emergency Team Leader shall immediately implement the mitigation measures as requested by the AAHK based on the ET's rapid spill evaluation.
6. The ET shall review existing monitoring data and conduct additional monitoring if necessary to ascertain whether the spill has resulted in any exceedances at nearby sensitive receivers (if the rapid spill evaluation has identified sensitive receivers to be at risk from the SS release).
7. The ET shall identify the need for any further mitigation measures in consultation with the AAHK and IEC.
8. The Emergency Team Leader shall implement the further mitigation measures as requested by the AAHK.
9. The ET shall review the effectiveness of the Contractor's mitigation measures and the updated situation until such time as all sensitive receivers show no exceedance in SS levels.
10. The Emergency Team shall assist the ET to prepare a spill investigation report to identify the cause / reason for the spill and the improvement measures / practices to prevent re-occurrence, and update this SRP if necessary.

### 5.3 Dolphin Contingency Plan

CWDs are commonly found within western waters of Hong Kong. If a spillage of oil / hazardous chemicals occurs in the marine environment and spreads over a large area, the health and wellbeing of CWDs might be endangered. As such, a Dolphin Contingency Plan shall be implemented for large scale oil / hazardous chemicals spills released into marine environment.

When a large scale (greater than 100m<sup>2</sup>) spill occurs, the individual identifying the spill shall inform the Emergency Team to proceed with the Dolphin Contingency Plan immediately as follows:

1. The Emergency Team shall determine the location and approximate extent of the spill from a high platform.
2. The dolphin observers shall check whether any CWDs are present in the vicinity of the spill, if possible.
3. The Emergency Team Leader shall ensure the appropriate spill response measures are implemented. These may include:

- a. Containment booms to minimise the spread of spill. This helps to prevent the CWDs from coming into contact with the spill and can act as a visual barrier to prevent the CWDs from entering the contaminated area;
  - b. Underwater barrier nets to isolate the CWDs from the spillage area, if necessary; and
  - c. Absorption materials such as pads or pillow to clean up the spill as soon as possible.
4. During deployment of the spill response measures, the dolphin observers shall maintain visual contact with any CWDs sighted in the area to ensure the CWDs are not trapped behind the contained areas.
5. The dolphin observers shall maintain watch of the spillage area until the spill is completely cleaned up. If dolphins are found to be entering into the contained spillage areas, the Emergency Team Leader / Emergency Team shall contact the ET and seek their advice for appropriate actions.

#### 5.4 Sensitive Receivers

When a large scale spill occurs, the following procedures shall be taken in order to protect sensitive receivers within the vicinity of the project site:

1. The Emergency Team shall implement all possible mitigation measures in order to isolate the spill and minimize any potential adverse impacts to the sensitive receivers.
2. The Emergency Team Leader shall immediately inform the relevant parties as mentioned in **Section 5.2**.
3. Potentially affected sensitive receivers such as seawater intakes, ecological sensitive receivers, fisheries and fish culture zones, corals and bathing beaches shall be identified by the ET.
4. The Emergency Team Leader shall immediately implement any mitigation measures at receiver as requested by the AAHK based on the ET / IEC's recommendations. This may include deployment of absorbent booms or other similar booms in order to surround and protect the sensitive receivers.
5. The ET shall implement additional water quality monitoring if necessary to determine any potential adverse impacts to the sensitive receivers and the need for any further mitigation measures.
6. The Emergency Team Leader shall implement any further mitigation measures as requested by the AAHK based on the ET / IEC's recommendations.
7. The ET shall continue to monitor the impacts at the sensitive receivers until the spill is completely cleaned up and there is no further adverse impacts to the sensitive receivers (as confirmed by water quality monitoring results).

#### 5.5 Neighbouring Residents

There are no neighbouring residents (i.e., non-airport operations-related personnel) situated within or immediately adjacent to the I-2RS and 3RS project areas who may be affected by spill events arising from the construction of the 3RS project. The nearest neighbouring residents are located over a kilometre away in Tung Chung. Consequently, no specific provisions for protecting neighbouring residents are required.

# 6 Construction Phase Spill Response Plan Implementation

## 6.1 Training

All construction site workers shall be introduced to the SRP during the environmental induction training and toolbox talks which should be carried out by the Contractors for each construction site. During the induction training and toolbox talks, a demonstration of the containment methods and equipment shall be carried out. The Contractors shall conduct toolbox talks with the site workers regarding the SRP periodically. Examples of spill related training topics are shown in **Table 6.1**. The toolbox talk training material prepared by the Contractors should be submitted to AAHK and reviewed by the ET, and the Contractors should update their materials regularly, if required. The Emergency Team Leader shall ensure that all relevant workers receive the appropriate spill related training prior to undertaking activities that may lead to spill or involve spill response. A training record shall be maintained by the Contractors to register the training provided and each individual’s signoff to acknowledge that the training has been attended and the content is understood. The training record should be made readily available to the ET and IEC for checking and auditing. Refresher training shall be provided regularly and all relevant workers shall attend and signoff subsequent refresher training at least once every 3 years. Training arrangements for dolphin observers will be detailed in the Marine Mammal Watching Plan under EP Condition 2.11 and a separate Dolphin Exclusion Zone (DEZ) Plan.

**Table 6.1: Spill Related Training Topics**

Training Topic	Applicable Personnel
Introduction to the SRP and its requirements on spill response	All construction site workers
Spill prevention and detection	All construction site workers
Work safety around the spill	All construction site workers
Containment of spill	All construction site workers
Recovery and clean up of spill	Spill clean up crew
Handling and disposal of waste generated from spill	Spill clean up crew

## 6.2 Spill Control Equipment

At least one set of spill kit should be provided and stored onsite near each storage area for chemicals or chemical waste. At least three sets of spill kits should be available aboard each vessel involved in marine works. An additional set of spill kit should be located near the Emergency Team’s office. Additional spill kits should also be provided onsite at locations or activities with a higher risk of spills. The Contractor shall ensure that sufficient spill kits are available onsite at all times. The Contractor shall ensure that all workers are aware of the locations of spill kits. The spill kit shall include, but are not limited to the following items:

- Oil absorbent pads;
- Oil absorbent socks;
- Sorbent booms;
- Silt curtains;
- Sweeps;
- Goggles;

- Protective masks;
- Nitrile gloves;
- Disposal bags;
- Instruction sheets; and
- Diagram of the site plan, including drainage plan of the site and the airport facilities.

Regular (at least quarterly and after each spill event) inspections and stocktaking of the resource materials in the spill response kit should be taken by the Emergency Team. Regular (at least annually) checking and testing of the functioning and validity date of the resource materials should also be carried out by the Emergency Team.

### 6.3 Drills

Regular drills would be carried out to ensure all site workers, especially the Emergency Team members, are proficient in his/her assigned duties. Where applicable, spillage incidents will be simulated, drilled and practiced at least annually. After commencement of works, Contractor shall provide the drill schedule to AAHK, ET and IEC for audit. Relevant parties including AAHK, ET and IEC, and relevant authorities such as FSD, MD, AFCD and Police would be invited to participate and/or witness the drill exercises.

### 6.4 Spillage Incident Report

For chemical related spills, the Emergency Team shall prepare a draft spillage incident report for submission to AAHK, ET and IEC within 2 days after the incident occurred. For spills of SS-generating materials (sand or public fill), the Emergency Team shall assist the ET to prepare a draft spillage incident report to AAHK and IEC within 5 days after the incident occurred. The draft incident report should include but are not limited to the following:

- Details of the spillage incident;
- Clean up actions taken;
- Any residues of the spill remaining in the environment;
- Follow up or monitoring actions taken if required; and
- Photo records.

A full investigation report of the spillage incident shall be submitted to AAHK, ET and IEC within 2 weeks after the incident occurred. In addition to the details of a draft incident report, the full report will investigate the reasons for the spill and evaluate the effectiveness of the procedures and precautionary measures taken and specified in this SRP. Where applicable, additional mitigation measures will be proposed and implemented to prevent similar occurrence of spill.

### 6.5 Information and Record Keeping

The SRP should be maintained as an easily accessible document onsite as well as in the AAHK's project office including the office of AAHK's contact point. Previous spillage incident reports and recommendations should also be kept for reference in case of similar spill events. All records of self-inspection, checking and testing, drills, and response training should be kept for record and reference.

## **6.6 Review and Update of the SRP**

The spill response procedures for construction phase as described in this SRP should be reviewed after every spillage incident and/or spill response drill, and at least annually, and relevant procedures and measures shall be updated as required.



## 7 Relevant Parties Contact List during Construction Phase

### 7.1 Emergency Contacts

The following tables (**Table 7.1– Table 7.4**) provide the names and telephone contacts of various parties who should be contacted in case of a spillage incident or emergency.

**Table 7.1: Project / Environmental Team’s Contact List**

Role	Contact No.
Airport Authority Hong Kong	2183 2734
Independent Environmental Checker	3729 0380
Environmental Team Leader	2828 5919

**Table 7.2: Contractor’s Emergency Team Contact List**

Role	Contact No.
Emergency Team Leader	Specified in each contract-specific SRP
Emergency Team members	Specified in each contract-specific SRP

**Table 7.3: Government Department Contact List**

Government Department	Contact No.
General Emergency Services	999
Labour Department	2717 1771
Fire Services Department	2723 8787
Agriculture, Fisheries and Conservation Department	2708 8885
Environmental Protection Department	2838 3111
Marine Department	2542 3711
Vessel Traffic Centre	2233 7801
Maritime Rescue Coordination Centre	2233 7999
Fire Station	Tung Chung Fire Station: 2988 1898 Chek Lap Kok Fire Station: 2949 9081
Ambulance	Tung Chung Ambulance Depot: 2988 8282
Hospital	North Lantau Hospital: 3467 7000

**Table 7.4: Utility Company Contact List**

Utility Company	Contact No.
China Light and Power Co. Ltd.	2728 8333
China Gas Co. Ltd.	2880 6999

The emergency contact list shall be reviewed at least annually. Any changes should be amended and notified to all onsite staff immediately.

## 8 Operational Phase Spill Prevention and Response

### 8.1 General

To align with the EIA Report, the AAHK remains dedicated to upholding the high standards of spill prevention and response practiced under the Two-Runway System (2RS) operation. The spill prevention and response framework has been developed based on the well-established procedures since the 2RS operation, which continue to be relevant and applicable to both the 1-2RS and 3RS operations.

This SRP has been updated to reflect the latest information and operational arrangements, outlining the measures to be implemented following the commissioning of the 3RS on 28 November 2024.

AAHK has devised two manuals, namely, the Airport Operations Manual (AOM) and Emergency Procedures Manual (EPM), which provide detailed aerodrome information and operational regulations for the various parties involved in the airport operations. Relevant sections of these manuals have been referenced in the preparation of this SPR, and all relevant parties should refer to the AOM and EPM for the guidance and procedures in the event of a spillage incident. These two manuals, AOM and EPM will be updated as necessary to reflect changes in operations and procedures.

The following sections present the detailed procedures for spill prevention and response during the operational phase of the 3RS.

#### 8.1.1 Airport Operations Manual (AOM)

The AOM is a key operational document for airlines, government authorities, aircraft ground services franchisees, and other airfield stakeholders. It provides comprehensive aerodrome information, along with the regulations and procedures mandated by the AAHK, to ensure the safe, orderly, and efficient conduct of airfield operations—including the movement of aircraft, passengers, baggage, cargo, mail, vehicles, and all apron-related activities—at Hong Kong International Airport (HKIA). These directives are developed in accordance with international standards and recommended practices outlined in the International Civil Aviation Organization (ICAO) Annex 14, the Aerodrome Manual approved by the Hong Kong Civil Aviation Department, the Aerodrome Licensing Requirements Document, and the Airport Authority Bylaws.

#### 8.1.2 Emergency Procedures Manual (EPM)

The EPM has been developed to meet the Aerodrome Licensing Requirements of the Civil Aviation Department, as stipulated under Article 73 of the Air Navigation (Hong Kong) Order 1995. It also adheres to the directives established by the Secretary for Security in Security Bureau Circulars titled “Contingency Plan for Dealing with an Aircraft Crash in Hong Kong” and “Contingency Plan for the Salvage of Crashed Aircraft.” The EPM outlines a series of contingency plans designed to ensure a coordinated and effective multi-agency response to emergencies occurring at HKIA. It functions as a guiding document that delineates the overarching roles, responsibilities, and actions of the AAHK, government departments, airport operators, external partners, and the Airport Emergency Centre during such incidents.

An overview of the following sections of AOM and EPM are included in **Appendix B**.

- *Part E – Section 5 Aviation Fuel Supply System* of AOM; and
- *Part 4A – Fuel Spillage from Aircraft* of EPM.

As both the AOM and EPM contain proprietary and confidential content, they are designated for internal reference only. Relevant information pertaining to spill prevention and emergency response under the I-2RS and 3RS operations are succinctly presented in the following sections.

## 8.2 Roles and Responsibilities

During the I-2RS and 3RS operational phases, the main parties responsible for operational spill response include AAHK, into-plane fuelling franchisee, line maintenance franchisee, government departments as well as tenants. The roles and responsibilities for such parties in spill response actions are specified in *Part 4A – Fuel Spillage from Aircraft* and *Part 15 – Dangerous Goods and Chemical Spills* of the EPM, and *Part E – Section 5 Aviation Fuel Supply System* of AOM.

## 8.3 Types of Spills

Based on the activities associated with the I-2RS and 3RS operations, the key types of spills that may potentially occur as a result of the project are:

- Fuels / Oils: which include the fuels used for aircraft fuelling operation and other fuels / oils used during operation of vehicles / plants or stored onsite, that may be accidentally spilled due to poor handling practices, leaking from fuel delivery equipment or in case of insufficient safeguards; and
- Chemicals: which include cleaning and maintenance chemicals for various plants / facilities such as lubricants and solvents.

## 8.4 Spill Prevention Measures

The spill prevention measures for the aforementioned types of spills are detailed in the AOM and also outlined as follows.

### 8.4.1 Aircraft Fuelling

Spill prevention measures form part of the aircraft refuelling procedures as outlined in the following sections of the AOM:

- *Part E – Section 5 Aviation Fuel Supply System for precautions prior to and during refuelling and defueling operation*; and
- *Part H – Section 3 General Requirements and Procedures Governing the Execution of Works On or Adjacent to Airside Operational Areas for cleanliness standards*.

### 8.4.2 Other Chemicals, Oils and Fuels

For other chemicals, oils and fuels required and used onsite, the measures specified in **Section 4.3** are also relevant and shall also be applied where applicable.

## 8.5 Spill Response Procedures

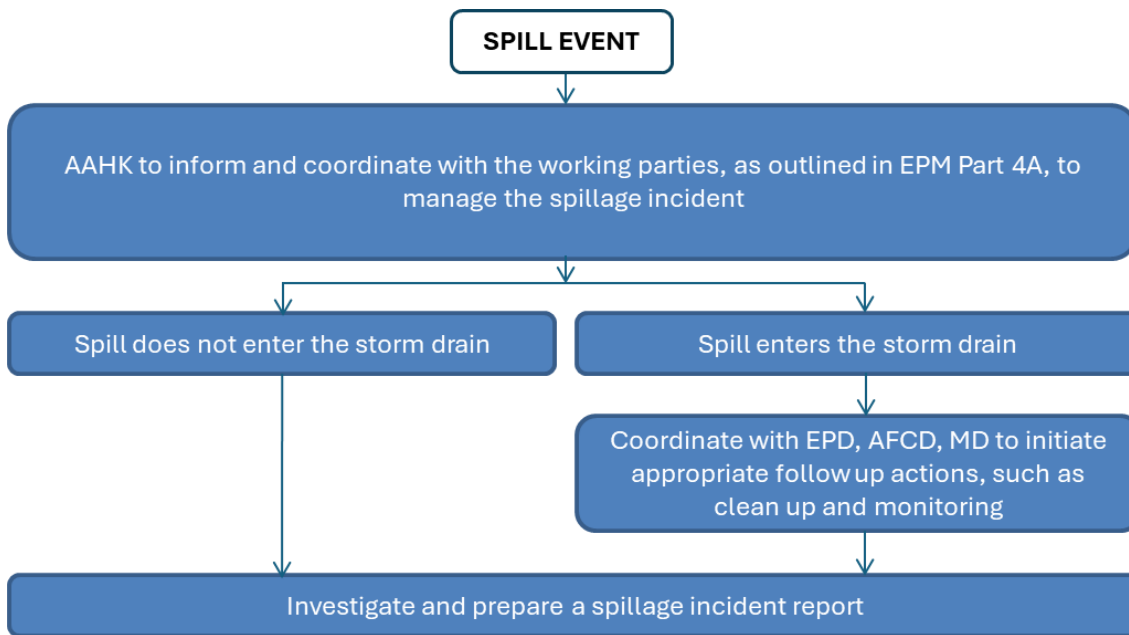
During the operational phase, there are two distinct types of spill response procedures which should be applied depending on the type of spill, i.e. those related to aircraft fuelling activities, and those not related to aircraft fuelling activities. The spill response procedures to be taken into effect in either case are described below.

### 8.5.1 Fuel Spillage from an Aircraft

Part 4A of the EPM also outlines the specific protocols and requirements for addressing fuel spillage incidents involving aircraft during servicing or manoeuvring within the airside operational area. In the event of a fuel spillage from aircraft, immediate actions should be taken to stop, contain and remove the spilt fuel to prevent any contamination to the environment.

The principal entities responsible for managing fuel spillage incidents include the into-plane fuelling franchisee, line maintenance franchisee, AAHK, airline operator, airport fire contingent, and ramp handling licensee. Their specific roles and responsibilities in the event of a fuel spillage incident are comprehensively detailed in Part 4A of the EPM. A flow diagram of the coordinated spillage incident response framework is summarised in **Figure 8.1**.

**Figure 8.1: Summary of Spillage Incident Response**



### 8.5.2 Other Fuel / Chemical Spills

For spillage incidents not involving aircraft servicing or manoeuvring in the airside operational area, the spill response procedures as specified in *Part 15 - Dangerous Goods and Chemical Spills* of the EPM will be followed. The cleanup and response procedures for oil spills are identical to those outlined in **Figure 8.1**, and should be communicated accordingly to the relevant parties.

### 8.5.3 Chinese White Dolphins and other Marine Ecology Sensitive Receivers

In the unlikely event that a spillage of oil / hazardous chemicals enters the marine environment and spreads over a large area, water quality and marine ecology sensitive receivers including Chinese White Dolphins (CWD) may be adversely affected.

To minimise the risk of adverse water quality and marine ecology impacts during operation phase, the scheme design of the 3RS has incorporated a number of prevention and protection measures, including:

- A 'spill trap containment system' at aircraft apron and stand areas;
- Regularly maintained oil/grease interceptors at stormwater drains;
- Diversion of runoff from aircraft and vehicle washing activities to foul sewer or temporary storage for subsequent removal and treatment off-site; and
- Design of fuel pipelines and hydrant systems with adequate protection and pressure / leakage detection systems.

These measures have been specifically designed to reduce the likelihood of spills entering the marine environment during operations to a very low level. Nevertheless, should any fuel spillages or chemical spills bypass these safeguards and enter the stormwater drainage system as mentioned in **Figure 8.1**, follow up actions such as clean up and monitoring will be coordinated with the relevant parties. The following measures will be implemented.

1. AAHK will identify the discharge points of the spill using the airport drainage plans and close the relevant outfall gates to prevent it from reaching the sea.
2. In parallel, AAHK will notify EPD, AFCD and MD.
3. AAHK will ensure that the appropriate spill response measures are implemented, such as deploying containment booms or using absorbent pads to contain and clean up the spill promptly.
4. Based on advice from EPD and/or AFCD, AAHK may conduct monitoring at the affected outfalls to detect the presence of the spilt substance(s) and determine whether further mitigation measures are required.
5. If necessary, AAHK will propose and implement additional mitigation measures in consultation with EPD and/or AFCD.
6. AAHK will continue to monitor the incident until the spill is completely dispersed or cleaned up and no adverse impacts to the marine environment are observed or detected, as confirmed by monitoring results or other indicators as agreed with EPD and AFCD.

#### 8.5.4 Neighbouring Residents

There are no neighbouring residents (i.e., non-airport operations-related personnel) situated within or immediately adjacent to the I-2RS and 3RS project areas who may be affected by spill events arising from the operation of the I-2RS and 3RS projects. The nearest neighbouring residents are located over a kilometre away in Tung Chung. Consequently, no specific provisions for protecting neighbouring residents are required.

## 8.6 Spill Control Equipment

Various items of equipment are available at the HKIA for dealing with fuel spillage, for example fuel barrels, sandbags and absorbent material. The full list of equipment is detailed in *Appendix 4A* in *Part 4A Fuel Spillage from Aircraft* under the EPM.

## 8.7 Training and Incident Recording

### 8.7.1 Spill Response Training

Training shall be provided on an as-needed basis to reinforce the adequacy of spill response. Especially for spillage incident related to aircraft operations, the refuelling crews and operators should be conversant with the contingency and spill response procedures as specified in the EPM.

### 8.7.2 Spillage Incident Recording

Should any spillage incident arise, the responsible parties shall always refer to the EPM for the latest reporting and recording procedures, as well as their responsibilities and lines of reporting. Details of the procedures should be referred to:

- *Part E – Section 5 Aviation Fuel Supply System under the AOM;*
- *Part 4A Fuel Spillage from Aircraft under the EPM for aircraft-related spillage incident, and*
- *Part 15 Dangerous Goods and Chemical Spills under the EPM for other chemicals-related spillage incident.*

## 8.8 Periodic Environmental Audit

AAHK has implemented the ISO14001 Environmental Management System across contracts with airport tenants and franchisees. Periodic environmental audits will be conducted to ensure relevant airport tenants and franchisees comply with the environmental requirements related to the maintenance of aircraft, vehicles and refuelling systems. These audits serve as a robust monitoring mechanism to discourage poor practices and promote continual improvement.

## 8.9 Emergency Contacts

The list of contacts for different departments, authorities and operators is provided in the *Annex B Telephone and Fax Directory* of the EPM. The key emergency contacts of AAHK Integrated Airport Centre – Apron Control Centre are 2910 1108 / 2181 8111 / 2910 1112.

# Appendices

- Appendix A. Requirements for Contract-specific Spill Response Plans during Construction Phase
- Appendix B Overview of Part E – Section 5 Aviation Fuel Supply System of Airport Operations Manual (AOM) and Part 4A – Fuel Spillage from Aircraft of Emergency Procedures Manual (EPM)

## **A. Requirements for Contract-specific Spill Response Plans during Construction Phase**



Individual construction Contractors are responsible for preparing their contract-specific SRP based on the general requirements specified in this Plan. Each contract-specific SRP shall be a standalone supplement to this Plan, and shall contain the following content:

#### Introduction / Project Description

- Description of the construction works under this contract / JV, including the scope, locations, types of construction activities, and programme.
- Potential for spills associated with this contract / JV's works / activities.

#### Roles and Responsibilities

- Specific organisation of the emergency team for this contract / JV, including description of roles and responsibilities.
- Organisation chart of the emergency team for this contract / JV.

#### Spill Prevention Measures

- Specific procedures for storage, transport and use of fuels / oils, hazardous chemicals and construction materials to be implemented under this contract / JV.
- Specific spill prevention measures for fuels / oils, hazardous chemicals and construction materials to be implemented under this contract / JV.

#### Spill Response Procedures

- Details of the lines of spill reporting, including parties to be notified under different spill conditions and responsible parties for different actions.
- Details of the spill response procedures to be implemented for different types of spills under this contract / JV.
- Details of the specific procedures for protecting marine mammals / sensitive receivers that may be affected by this contract / JV (for spills that may enter the marine environment).

#### Spill Response Plan Implementation

- Details of the spill response training for construction workers and emergency team members / spill clean up crew under this contract / JV.
- Specific types and quantities of spill response equipment available for immediate deployment in the event of a spill and their on-site storage locations for this contract / JV.
- Template of the spillage incident investigation report.

#### Relevant Parties Contact List

- Specific contacts of the project team and emergency team for the contract and any proposed variation to the relevant parties contact list of this Plan.

All contract-specific SRPs shall be submitted to the AAHK and ET for review and checking to ensure the contract-specific SRP conforms to this Plan and meet the requirements of EP Condition 2.16. All contract-specific SRPs shall be certified by the ET Leader and verified by the IEC before commencement of construction of individual contracts.

## **B. Overview of Part E – Section 5 Aviation Fuel Supply System of Airport Operations Manual (AOM) and Part 4A – Fuel Spillage from Aircraft of Emergency Procedures Manual (EPM)**

## **Overview of Part E – Section 5 Aviation Fuel Supply System of Airport Operations Manual (AOM)**

This Annex is prepared to provide an overview of the aircraft refuelling operations at HKIA, which are conducted in accordance with the AOM. These procedures are designed to ensure the safety, efficiency, and regulatory compliance of all refuelling activities on the apron.

- i) Prior to refuelling, a designated refuelling in-charge must be appointed to supervise the refuelling procedures and handle any irregular situations;
- ii) Suitable fire extinguishers and an aviation fuel system emergency shutdown valve are available at readily accessible positions at the aircraft parking stands, and a refuelling zone extending not less than 6 metres radially from the filling and venting points of the aircraft and from the hydrant valve in use for the refuelling is established;
- iii) To ensure safety during refuelling operations, aircraft engines shall not be running. Only qualified personnel shall be permitted to operate the refuelling equipment and shall be responsible for ensuring that the fuel flow is promptly cut off in the event of an emergency;
- iv) Personnel engaged in refuelling shall not carry lighters or other means of ignition, and shall not wear footwear with exposed iron or steel studs;
- v) The aircraft, refuelling vehicle, hose coupling or nozzle, filters, tunnels or any other appliance through which fuel passes shall be effectively bonded to each other before filler caps are removed, and shall not be disconnected until the filler caps have been replaced;
- vi) Cable, clips and plugs for bonding shall be kept in good condition;
- vii) The airline or aircraft operator shall ensure that all personnel working inside or in the immediate vicinity of the aircraft are made aware that refuelling is taking place;
- viii) Refuelling vehicles and equipment should be positioned in a manner that eliminates the need for reverse departure and enables immediate exit from the stand in the event of an emergency; and
- i) The refuelling in-charge shall maintain constant control of the vicinity of aircraft to ensure the correct positioning of service equipment and parking of refuelling vehicles.

When passengers remain on board during refuelling operations, it is necessary to inform both the Captain of the aircraft and the Station Engineer of the respective airline. Throughout the refuelling operation, if fuel vapour is detected within the aircraft interior or any other hazard arises, all refuelling and cleaning activities using electrical equipment within the aircraft should be stopped until conditions are deemed safe to resume. Communication between the refuelling in-charge and the pilot must be maintained via the aircraft's inter-communication system or other suitable method. In the event that safety precautionary measures are not fully complied with, the refuelling operator must stop defueling operations upon receiving instructions from the Airfield Officers.

If any spillage incident occurs during refuelling, the refuelling agent of the into-plan refuelling franchisees or the line maintenance franchisee must inform ACC of the incident. An Airfield Officer will then be deployed to investigate the spillage incident. The line maintenance franchisee must immediately respond to contain and remove the spilt fuel, and mechanical methods should be used whenever possible to reduce environmental contamination.

In the event of a large-scale fuel spillage, Airport Fire Contingent (AFC) will discharge foam compound to blanket the affected area. The affected area will be cleaned up by the line maintenance franchisee. If an emulsifying agent is used, the emulsified contaminant must be prevented from entering the storm water drainage system, in order to comply with environmental protection requirements.

## **Overview of Part 4A – Fuel Spillage from Aircraft of Emergency Procedures Manual (EPM)**

This Annex stipulates emergency response procedures required for a fuel spillage incident involving aircraft during servicing or manoeuvring in the Airside Operational Area. Fuel spillage on airside operations is categorised into minor spill (less than 20 litres and not of a running nature) and major spill (more than 20 litres or of a running nature). The Airport Authority will alert Fire Services Department (Airport Division) on receipt of fuel spillage notification, regardless whether it is minor or major spill. The Into-plane Fuelling Franchisee shall immediately stop the fuel flow and notify Engineer-in-charge of the Line Maintenance Franchisee and AA Integrated Airport Centre – Apron Control Centre of the spill. The Into-plane Fuelling Franchisee is responsible to clean up the affected area if the spill is less than 20 litres and not of a running nature. In the event of a major spill, Line Maintenance Franchisee shall make arrangement to stop the fuel spill from the aircraft and shall also co-ordinate with the AA Incident Coordinator and communicate with the aircraft commander / crew regarding the spill. The respective franchisee will provide response to contain and remove the spilt fuel. The AA Incident Coordinator will also assist in cleaning up of the affected area if the spill is found on runway, taxiway and taxilane. The AA Manager, Sustainability will stand by to provide advice for the protection of storm drains during clean up, co-ordinate with the Environmental Protection Department and Agricultural, Fisheries and Conservation Department as required.

Fuel should not be washed into drains or culverts. Every effort should be made to contain and recover the product. AA Airfield Department Apron Section coordinates with the into-plane refuelling franchisee to immediately stop the fuel flow in the event of a spill, remove the spilt fuel as soon as possible, and cordon off the incident site to control the movement of personnel and equipment. Precautionary measures shall be taken to prevent fuel getting into the storm water drainage system. The AA Airfield Department Airfield Section shall coordinate with the AA Technical Services Infrastructure Department to assist with the containment and removal of spilt fuel from runways, taxiways, taxilanes, and parking stands. If required, further coordination shall be made with the AA airfield cleaning contractor to ensure thorough cleaning of the affected area.

In the event of a major fuel spillage (i.e. a spill more than 20 litres or of a running nature) the Line Maintenance Franchisee must contain, control, and clean the affected area. They must also coordinate with the AA Incident Coordinator to arrange for Aviation Fuel Supply Company Operations Ltd to deploy a fuel suction machine to remove of fuel trapped in the oil interceptor chamber as required.