
 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 1 of 27


AIR QUALITY MANAGEMENT PLAN (DIFFUSE SOURCES)

3	02/11/2016	Updated based on changes to project configuration	MFC		
2	22/04/2015	Response LSP's Comments	ERM	See attachment of reviewer's signature	
1	25/02/2015	Response LSP's Comments	ERM	See attachment of reviewer's signature	
0	14/01/2015	Issue For Review	ERM	See attachment of reviewer's signature	
REV.	DATE (dd/mm/yyyy)	DESCRIPTION	PREPARED	CHECKED	APPROVED

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 2 of 27


ATTACHMENT OF REVIEWER'S SIGNATURE

NO	Name	Position	Signature
1	Pholavit Thiebpattama	Overall Project Director	
2	Le Duy Dong	HSE Manager	
3	Kitti Phadungchiwit	Manager of Package A	
4	Somsak Sombatboriboon	Manager of Package BCD	
5	Wason Srisupap	Manager of Package E	
6	Nisit Jintawong	Manager of Package F & H	
7	Amnat Pheerawat	Manager of Package G	
8	Saran Janjira	Project Engineer	
9	Jittinun Dokmaithes	Project Engineer	
10	Pacharavalee Thipdech	Project Engineer	
11	Nampon Arttaweeporn	Project Engineer	
12	Unchalee Mulalee	Project Engineer	
13	Nukool Phiwtaeng	Project Engineer	
14	Siridao Techapermphon	Project Engineer	
15	Jirapol Kosolwadhana	HR Director	
16	Pham Hung Thinh	CSR Manager	
17	Huynh Tan Khiem	Project Engineer	
18	Pham Hong Phuong	Overall Project Coordinator	

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 3 of 27

REVISION LOG

Rev.	Date (dd/mm/yyyy)	Revised Detail			
		Item	Page	Article	Description
0	14/01/2015	all	all	all	Issue For Review
1	25/02/2015	all	all	all	Response LSP's Comments
2	22/04/2015	all	all	all	Response LSP's Comments
3	02/11/2016	all	all	all	Updated to reflect project changes

 <u>Long Son Petrochemicals Co., Ltd</u>	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 4 of 27
LSP Doc. No : LSP-1S01-0007		

CONTENTS


ACRONYMS	5
DISCLAIMER	6
1 INTRODUCTION	7
1.1 PURPOSE AND SCOPE	7
1.2 PROJECT OVERVIEW	7
1.3 AIR POLLUTION SOURCES	8
1.4 APPLICABLE STANDARDS	8
2 ROLES AND RESPONSIBILITIES	9
2.1 INTRODUCTION	9
2.2 LSP CONSTRUCTION HSSE TEAM	9
2.3 CONTRACTORS HSSE TEAM	11
2.4 DESCRIPTION OF ROLES AND RESPONSIBILITIES	11
3 MITIGATION / MANAGEMENT PROCEDURES	13
4 MONITORING	17
4.1 LSP HSSE TEAM	17
4.2 CONTRACTORS TEAM	17
5 AUDITING AND REPORTING	19
5.1 LSP HSSE TEAM	19
5.2 CONTRACTORS TEAM	19

ANNEX A – CONSTRUCTION SCHEDULE FOR THE DIFFUSE SOURCES OF AIR POLLUTION

ANNEX B – AMBIENT AIR QUALITY STANDARDS


ANNEX C – EMPLOYEE CONTACT DETAILS ASSOCIATED WITH MANAGEMENT PLAN

ANNEX D – DAILY REPORTING FORM

 <u>Long Son Petrochemicals Co., Ltd</u>	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 5 of 27
LSP Doc. No : LSP-1S01-0007		

ACRONYMS


BOC	Balance of Complex
CO	Carbon Monoxide
CTU	Central Utility Plant
EHS	Environmental, Health and Safety
ESIA	Environmental and Social Impact Assessment
HCL	Hydrogen Chloride
HDPE	High Density Polyethylene
HSE	Health, Safety and Environment
HSSE	Health, Safety, Security and Environment
IFC	International Finance Corporation
LLDPE	Linear Low Density Polyethylene
LSP	Long Son Petrochemical
MONRE	Ministry of Natural Resources and Environment
MP	Management Plan
NO ₂	Nitrogen Dioxide
O ₃	Ozone
Pb	Lead
PM _{2.5}	Particulate Matter smaller than 2.5 micrometers
PM ₁₀	Particulate Matter smaller than 10 micrometers
PP	Polypropylene
PS	Performance Standard
QCVN	National Technical Regulation
SO ₂	Sulphur Dioxide
TSP	Total Suspended Particulates

 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 6 of 27

DISCLAIMER

It is upon the Contractor to solicit, acquire and comply with all information, laws, rules, regulations, and Applicable Standards which is/are necessary and/or required for and applicable to the Contractor's performances of the works hereunder.

The Contractor hereby agrees and acknowledges that the Employer makes no representation or warranty, express or implied, regarding the accuracy or completeness of any or all information, laws, rules, regulations, and Applicable Standards which is/are necessary and/or required for and applicable to the Contractor's performances of the works hereunder. THE EMPLOYER HEREBY EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ALL RESPECTS, and the Contractor agrees that neither the Employer nor any of its affiliate(s), director(s), officer(s), employee(s), consultant(s), professional advisor(s), and duly authorised representative(s) shall have any liability to the Contractor or any of its affiliate(s), director(s), officer(s), employee(s), consultant(s), professional advisor(s), and duly authorised representative(s) in any way relating to those information, laws, rules, regulations, and Applicable Standards which is/are necessary and/or required for and applicable to the Contractor's performances of the works hereunder or the Contractor's or its affiliate(s)', director(s)', officer(s)', employee(s)', consultant(s)', professional advisor(s)', and duly authorised representative(s)' reliance thereupon and/or use thereof.

 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 7 of 27

1 INTRODUCTION

1.1 PURPOSE AND SCOPE

The purpose of this Air Quality (Diffuse Sources) Management Plan (MP) is to set out *[insert contractor name here]* approach to manage and mitigate the residual impacts to air quality from diffuse sources that they have control over, as identified in Chapter 9 of the project's Environmental and Social Impact Assessment (ESIA) and the Long Son Petrochemical's (LSP) Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

It should be noted the information in this Air Quality (Diffuse Sources) MP is based on relevant regulations, guidelines and standards at the time of writing of the ESIA dated 2016. Should the contractors activities change or new regulations, guidelines or standards apply the contractor will review, amend and resubmit this Air Quality (Diffuse Sources) MP to LSP.

[Note to contractor: If your onsite activities do not have the potential to impact air quality from diffuse sources, you do not need to complete this template but will need to provide justification as to why it is not applicable, e.g., you will be not undertaking earth works, etc.]


1.2 PROJECT OVERVIEW

The Long Son Petrochemicals Complex Project is located in Hamlet 2 and Rach Gia Hamlet, Long Son Commune, Vung Tau City, Ba Ria – Vung Tau Province, Vietnam. The Complex is spread over 464 ha, including area for its future expansion. The main Project components comprise of two areas:

1) The Petrochemical Plant, which consists of the following plants and units:

- Main Production Plants
 - Olefins Plant
 - High Density Polyethylene (HDPE) Plant
 - Linear Low Density Polyethylene (LLDPE) Plant
 - Polypropylene (PP) Plant
- Supporting Units
 - Central Utility Plant (CTU) (contains a Steam Generation Unit and Water Plant)
 - Tank Farm
 - Common Infrastructure

2) The Seaport, which consists of the following components:

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 8 of 27

- Hydrocarbon Jetty - to transfer feedstock and product for the Petrochemical Plant; and
- Construction Jetty - to import construction materials, including heavy lift modules.

The total land area that will be acquired for the Project is 464 ha, consisting of 398 ha for the Complex, and 66 ha for the specific port. In addition, there is a total water surface area of 194 ha that will be acquired for the seaport.

1.3 **AIR POLLUTION SOURCES**

The potential diffuse sources of air pollution during construction are as follows:

- Drilling and blasting of rock;
- Sand blasting of material surface;
- Material (such as soil, sand, rock, etc.) transportation by vehicle;
- Removal of vegetation and other structures onsite;
- Removal of topsoil and other soils considered unsuitable as foundations for the Project; and
- Earth cut and fill operations.


The construction schedule for the diffuse sources of air pollution is shown in Annex A.

[Note to contractor: Contractor to insert Gantt chart of construction schedule in Microsoft Project Office format in Annex A, which should include a breakdown of the tasks that give rise to diffuse sources of air pollution, as noted above]

1.4 **APPLICABLE STANDARDS**

The applicable ambient air quality standards associated with the diffuse sources during construction are as follows:

- QCVN 05:2013/BTNMT National technical regulations on ambient air quality (the applicable standards are shown in Annex B);
- Circular No. 16/2009/TT-BTNMT dated October, 7, 2009 of MoNRE on guiding the implementation of National technical regulations on environmental protection; and
- IFC General Environmental, Health and Safety (EHS) Guidelines - Air emissions and ambient air quality (2007).

 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 9 of 27

2 ROLES AND RESPONSIBILITIES

2.1 INTRODUCTION

Having an appropriate organisational structure in place, with all people having defined roles and responsibilities, is essential to ensuring the overall success of this Air Quality (Diffuse Sources) MP. This section provides details of LSP's and the contractor's organisational structure with regards to onsite delivery of the LSP project, and the various roles and responsibilities of those people in relation to delivering the clients EHS expectations, including meeting the requirements of the Construction Health, Safety and Environment Management Plan.

2.2 LSP CONSTRUCTION HSSE TEAM

LSP's health, safety, security and environmental (HSSE) team will lead the management of HSSE issues concerned with air quality impacts from diffuse sources. The LSP organisational chart to implement the requirements of this Air Quality (Diffuse Sources) MP is shown in **Figure 1** below. The specific roles and responsibilities are shown in Chapter 5 of the LSP Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

Figure 1. LSP's Health, Safety, Security and Environmental Team



Long Son Petrochemicals Co., Ltd

LSP Doc. No : LSP-1S01-0007

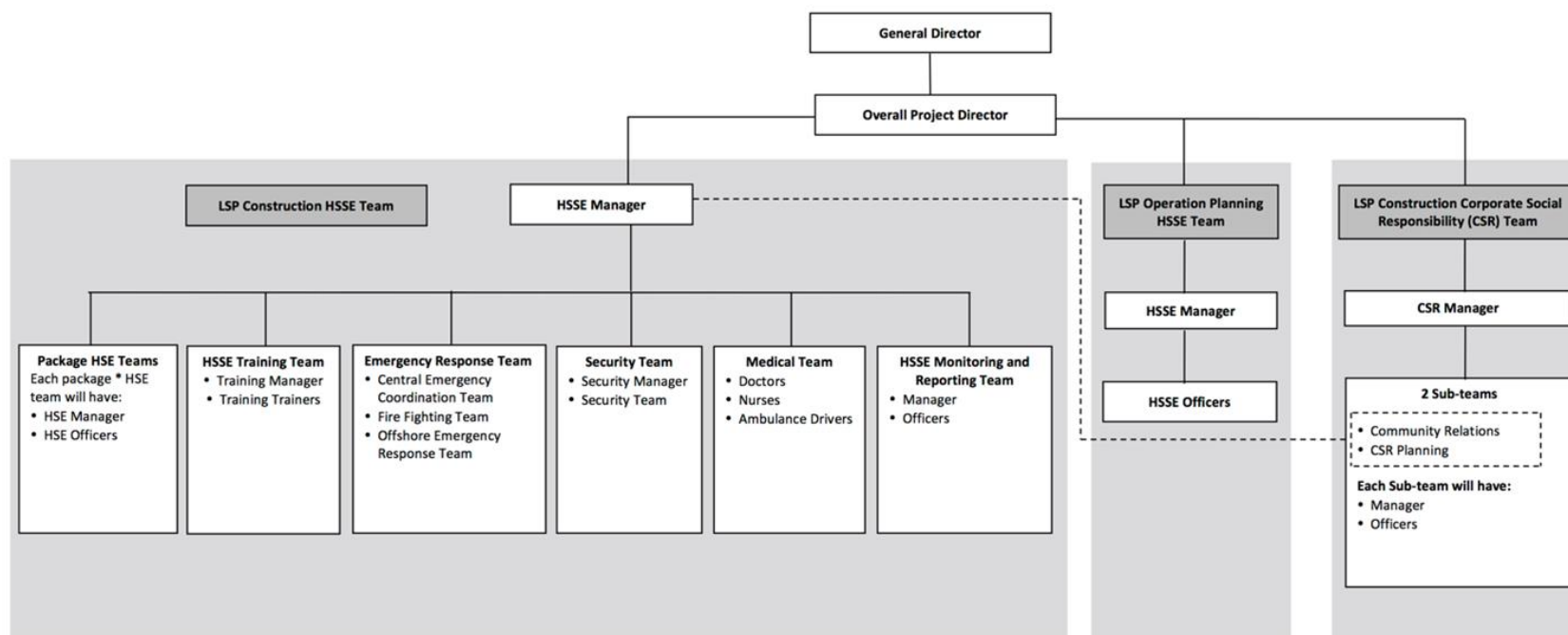
Long Son Petrochemicals Co., Ltd.

HSSE Department

Rev. 2

Air Quality Management Plan (Diffuse Sources)

Page: 10 of 27



Note: *

Package A: Olefins Plant, Tank farm, Complex interconnecting pipelines/pipe racks, Land development of tank farm area, Topside facilities of hydrocarbon jetties, Complex Wastewater Treatment Unit and HP Flare/LP Flare system

Package B/C/D: Polyolefins Plant (HDPE/PP/LLDPE)


Package F: Sea Port (excluding Top site of the Hydrocarbon Jetties and construction Jetty which are under the scope of the Contractor Package A and Package I respectively)

Package G: Central Utility Plant (including Steam Generation Unit and Water Plant)

Package H: Common infrastructure of the Complex (including Administration Building, Laboratory Building, Canteen Building, Emergency Center, First Aid Center and Polyolefins Product warehouse)

Package I: Complex road including drainage, street lighting, CCTV, green area, Top site for construction Jetty, Complex truck scale, and Blown film system

Package L: Land development work of the whole complex except tank farm area

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 11 of 27

2.3

CONTRACTORS HSSE TEAM

The contractors HSSE team has established this Air Quality (Diffuse Sources) MP in accordance with the applicable standards. The contractors HSSE team will manage their contractors and suppliers in accordance with this Air Quality (Diffuse Source) MP and liaise with the appropriate personnel within LSP's HSSE to ensure compliance with the overall aims of LSP's Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

The contractors onsite organisational chart to implement the requirements of this Air Quality (Diffuse Sources) MP is shown in the figure below.

[Note to contractor: Contractor to insert organisational chart for onsite team].

2.4

DESCRIPTION OF ROLES AND RESPONSIBILITIES

The contractor has committed to providing the necessary human resources to ensure that the organisational structure noted above can work to implement this Air Quality (Diffuse Sources) MP and achieve compliance with all relevant standards. A description of the key roles and their responsibilities are provided in *Table 2.1*, including the primary communication channel between LSP and contractor HSE teams. Employee contact details for each role associated with this Air Quality (Diffuse Sources) MP are provided in Annex C.



 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 12 of 27

Table 2.1 EHS Roles and Responsibilities within Contractor's Project Team

Role	Responsibilities
General Manager (Contractor)	
Senior Site Engineer (Contractor)	
Site Supervisor / Foreman (Contractor)	
Site EHS Officer (Contractor)	
Emergency Response Co-ordinator (Contractor)	
[Other]	
[Other]	

[Note to Contractor: Insert a description of the responsibilities of each role, with regards to the management of EHS and Air Quality (Diffuse Sources). Delete roles that are not appropriate. Include additional roles where required.]

 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 13 of 27

3 MITIGATION / MANAGEMENT PROCEDURES

The mitigation / management procedures noted in this section provides the approach to managing diffuse sources of pollution that could potentially impact air quality in relation to construction activities. The contractor is committed to implementing the identified mitigation / management procedures in order to not cause exceedance of the applicable ambient air quality standards, and to avoid impacts on the local community.

The mitigation / management measures that are relevant to *[insert contractors name here]* onsite activities are shown in *Table 3.1*.

The mitigation / management procedures were identified within the ESIA as being appropriate for the environmental impacts resulting from the anticipated construction activities. Should impacts to air quality arise from the contractors' activities, following the implementation of the procedures noted in *Table 3.1*, the contractor will review the need for additional measures to be taken and update this Air Quality (Diffuse Sources) MP accordingly.

Based on the outcomes of monitoring, plus the outcomes of the socio-economic baseline surveys, a number of sensitive receptors were identified for incorporation into modelling and impact assessment. These are shown in **Figure 2** below and described below:

- Residential house at K1, in Village 2;
- Residential house at K2, in Village 1;
- Residential house at K3;
- Residential house at K4, in Rach Gia.

All of these above identified receptors are considered to have high sensitivity to changes in air quality caused by the Project.


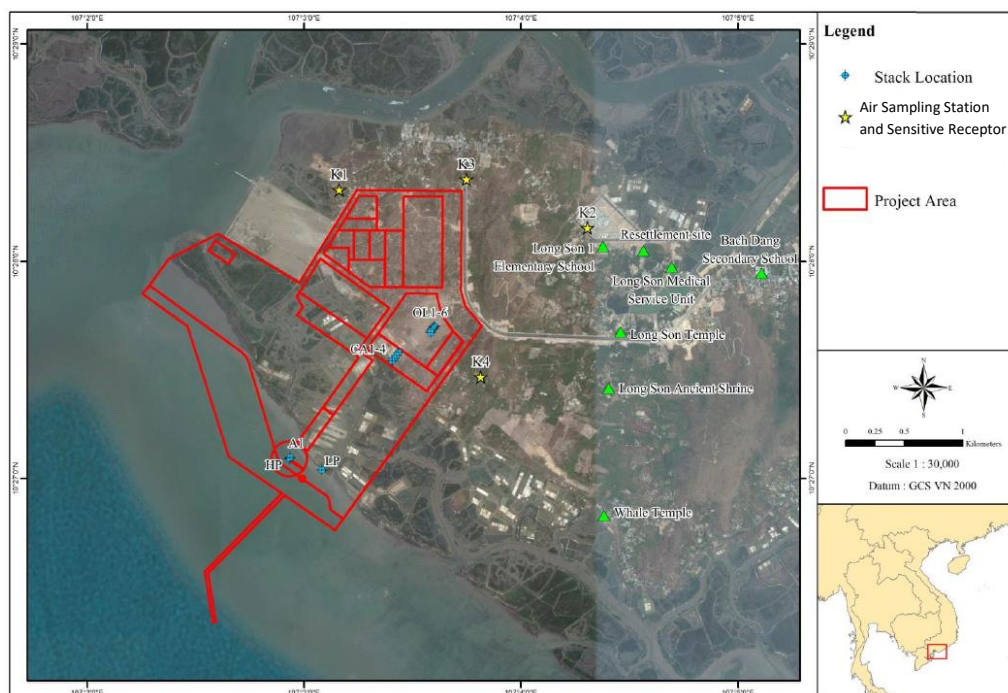
 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 14 of 27

Figure 2: Sensitive Receptors for Air Quality Impact Assessment



Note to contractor: Delete mitigation / management measures which are not applicable or outside of your control. Insert the name of the responsible party from Table 2-1 for each mitigation / management measure.




 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.		
	HSSE Department		Rev. 2
	Air Quality Management Plan (Diffuse Sources)		Page: 15 of 27

Table 3.1 Mitigation / Management Procedures

Aspect, Potential Impact / Issue	Mitigation Reference	Mitigation and / or Management Procedures	Contractors Responsibility	Related Plans
Impacts due to Fugitive Dust from Soil Disturbance during the Construction Phase	1.1	Water sprays should be applied at land preparation area, access roads, soil stockpiles and any other exposed surfaces which could be source of dust are to be watered in instances where rain hasn't fallen in the previous 24 hours, or as soon as visible dust emissions start to occur.		Soil and Groundwater Management Plan (ref: LSP-1S01-0012)
	1.2	The height from which materials are dropped should be reduced to a practical minimum height to control fugitive dust emission arising during materials handling.		-
	1.3	The loads carried by the vehicle should be covered by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.		-
	1.4	Coordination of the construction schedule to minimise dust emissions during peak times of the construction phase throughout utilising knowledge of meteorological conditions e.g., rainfall periods and prevailing wind patterns.		-
	1.5	Any overburden material and stockpiles are to be utilised where possible for physical barriers and windbreaks.		-
	1.6	Dry materials are to be watered prior to haulage in order to prevent particulate emissions. This will be applied to all loads except for where it already contains enough moisture content to minimise dust generation, or where watering it would render it unsuitable for the construction material for which it is intended.		-
	1.7	No cleared vegetation to be burnt. Cleared vegetation will either be composed or reused for stabilization purposes.		-

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.		
	HSSE Department		Rev. 2
	Air Quality Management Plan (Diffuse Sources)		Page: 16 of 27

Aspect, Potential Impact / Issue	Mitigation Reference	Mitigation and / or Management Procedures	Contractors Responsibility	Related Plans
	1.8	Stockpile heights and areas should be limited, and removal should take place from downwind side.		-
	1.9	Areas of construction, stockpile areas and other exposed soils will be designated as such in order to minimize vehicle movements over these to the minimum amount possible.		
	1.10	Control speed limit of the trucks and other vehicles so that traffic within the Project boundary does not result in excessive dust.		

 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 17 of 27

4 MONITORING

4.1 LSP HSSE TEAM

An ambient air quality monitoring plan has been developed to track the effectiveness of the mitigation measures during construction. Details of LSP's monitoring plan are provided in Chapter 7 of LSP's Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

LSP may request additional monitoring if the monitoring programme records exceedances of the applicable ambient air quality standards.

It should be noted that LSP's Community Grievance Management Plan (LSP Doc. No. LSP-1S03-0001) ensures community concerns are responded to and managed appropriately, including issues of air quality.

4.2 CONTRACTORS TEAM

In order to assess the effectiveness of the mitigation / management measures and identify the need for further action, the contractors air quality monitoring programme outlined in *Table 4.1* will be followed.

Should the monitoring programme note any non-compliances with the MP, corrective action will be taken to ensure the relevant activity returns to compliance in a timely manner and that any corrective action is appropriate and effective. Any corrective actions undertaken must be recorded on the daily report against the relevant activity.

Note to contractor: Delete rows that are not applicable or outside of your control and, in the second column, only include the reference to relevant mitigation / management measures. Insert the name of the responsible party from Table 2-1 for each of the separate monitoring requirements.



 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 18 of 27

Table 4.1 Monitoring Programme

Aspect, Potential Impact / Issue	Reference of Relevant Mitigation Measure *	Sampling Location	Sampling Parameters	Sampling Frequency	Applicable Standards	Responsibility	Reporting
Fugitive dust emissions	1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9	Construction area under contractors control	Visual inspection for ambient dust and smoke	Daily	N/A – based on visual assessment		Daily (refer to Annex D for report example)
	1.3	Vehicles under contractors control	Visual inspection to ensure vehicles covered by clean impervious sheeting	Daily	N/A – based on visual assessment		Daily (refer to Annex D for report example)
	1.10	Vehicles under contractors control	Visual inspection to confirm circulation of vehicles does not result in excessive dust (adjust speed limit as required).	Daily	N/A – based on visual assessment		Daily (refer to Annex D for report example)

* See Table 3-1 for mitigation measure.

 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 19 of 27

5 AUDITING AND REPORTING

An Auditing and Reporting Programme is required to ensure that the mitigation / management measures are appropriate in controlling the identified air quality impacts from diffuse sources.

5.1 LSP HSSE TEAM

To ensure compliance with the requirements of this Air Quality (Diffuse Sources) MP, internal inspections and audits will be undertaken by LSP. The LSP auditing and reporting programme is shown in Chapter 9 of the LSP Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

5.2 CONTRACTORS TEAM

The programme will comprise of the following:

- Internal Audit and Reporting Programme to be undertaken by the contractor's EHS Officer; and
- External Audit and Reporting Programme, to be conducted by the LSP's representative.

The scope of the internal auditing and reporting programme to be undertaken by the contractor is shown in *Table 5.1*.

Note to contractor: In the second column, only include the reference to relevant mitigation / management measures. Ensure the job title for the responsible party is correct for your organisation.



 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 20 of 27


Table 5.1 Auditing and Reporting Programme

Inspection / Auditing Interval	Reference of Relevant Mitigation Measure*	Responsibility	Scope of Inspection / Audit	Report Submission / Record Keeping
Daily Inspection (Internal)	1.1, 1.2, 1.3, 1.4, 1.5,1.6, 1.7, 1.8, 1.9, 1.10	Contractor's Onsite EHS Officer	Review the submitted daily monitoring reports to assess the compliance status of relevant operations that may give rise to impacts to air quality and provide support to identifying appropriate corrective actions and ensuring they are: introduced in a timely manner; appropriate; and effective	Archive Daily Monitoring Report in an orderly manner for external auditing All reports are to be maintained at the project site for as long as the Contractor is working at the site
Weekly Review of Daily Inspection Reports (Internal)	1.1, 1.2, 1.3, 1.4, 1.5,1.6, 1.7, 1.8, 1.9, 1.10	Contractor's General Manager	A week report is to be provided to the Contractor's Onsite General Manager, which is to include: the compliance status of relevant operations that may give rise to impacts to air quality; identifying any non-compliances that have arisen over the previous week; detailing the corrective actions that have been taken when a failure has been noted; and noting the appropriateness and effectiveness of any corrective actions	Archive Weekly Report in an orderly manner for external auditing All reports are to be maintained at the project site for as long as the Contractor is working at the site

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Page: 21 of 27


Inspection / Auditing Interval	Reference of Relevant Mitigation Measure*	Responsibility	Scope of Inspection / Audit	Report Submission / Record Keeping
Biannual Inspection (External)	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10	LSP's Representative	LSP's Representative will review the subcontractor's onsite activities to assess compliance with the management plan and review all records of the Contractor's internal audit programme to review historic compliance and the use of appropriate corrective actions	<p>A copy of the External Audit Report is to be provided to the Contractor for reference and, where necessary, implementation of any identified corrective actions</p> <p>All reports are to be maintained at the project site for as long as the Contractor is working at the site</p>

* See Table 3-1 for mitigation measure.

 <u>Long Son Petrochemicals Co., Ltd</u> LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Annex A

ANNEX A – CONSTRUCTION SCHEDULE FOR THE DIFFUSE SOURCES OF AIR POLLUTION


[Note to contractor: Contractor to insert Gantt chart of construction schedule in Microsoft Project Office format in Annex A]

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Annex B


ANNEX B – AMBIENT AIR QUALITY STANDARDS

National Technical Regulation on Ambient Air Quality

Parameters	1 hour Average ($\mu\text{g}/\text{m}^3$)	8-hour Average ($\mu\text{g}/\text{m}^3$)	24-hour Average ($\mu\text{g}/\text{m}^3$)	Annual Average ($\mu\text{g}/\text{m}^3$)
QCVN 05:2013/BTNMT				
Sulphur Dioxide (SO_2)	350	-	125	50
Carbon Monoxide (CO)	30,000	10,000	-	-
Nitrogen Dioxide (NO_2)	200	-	100	40
Total Suspended Particulates (TSP)	300	-	200	100
Particulate Matter 10 (PM_{10})	-	-	150	50
Particulate Matter 2.5 ($\text{PM}_{2.5}$)	-	-	50	25
Lead (Pb)	-	-	1.5	0.5
Ozone (O_3)	200	120	-	-

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Annex C


ANNEX C – EMPLOYEE CONTACT DETAILS ASSOCIATED WITH MANAGEMENT PLAN

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Annex C


Role	Responsibilities	Contact Details*
General Manager (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Senior Site Engineer (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Site Supervisor / Foreman (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Site EHS Officer (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Emergency Response Co-ordinator (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
[Other]		
[Other]		

*Any change in respect to employees, the contact details will need to amended as soon as the role has been reassigned.

[Note to Contractor: Insert a description of the responsibilities of each role, with regards to the management of EHS and Air Quality (Diffuse Sources). Delete roles that are not appropriate. Include additional roles where required.]

 <u>Long Son Petrochemicals Co., Ltd</u>	Long Son Petrochemicals Co., Ltd.	
	HSSE Department	Rev. 2
	Air Quality Management Plan (Diffuse Sources)	Annex D
LSP Doc. No : LSP-1S01-0007		

ANNEX D – DAILY REPORTING FORM

 Long Son Petrochemicals Co., Ltd LSP Doc. No : LSP-1S01-0007	Long Son Petrochemicals Co., Ltd.		
	HSSE Department		Rev. 2
	Air Quality Management Plan (Diffuse Sources)		Annex D

[Note to contractor: The below table provides an example of the details to be included on a Daily Reporting Form.]

Date of Observation	Contact Details / Role of Individual Reporting the Emissions	Details of Observation / Location	Mitigation Action to be Taken	Date Mitigation Action was Implemented