Ref: CA38864



Department of Environment and Heritage Protection

19 February 2016

Ms Joanne Dunn FTI Consulting Pty Ltd 22 Market Street BRISBANE QLD 4000 cc. Mr Mick McManus Passage Holdings Pty Ltd [By Email: <u>Mick.McManus@ioninfrastructure.com.au]</u>

Dear Ms Dunn,

Compliance Inspection - Environmental Authority EPPR00576713

I refer to the compliance inspection of the Port Hinchinbrook Sewage Treatment Plant (STP) conducted on 8 December 2016 by the Department of Environment and Heritage Protection (EHP).

The site inspection was conducted in the presence of Mr Ashley Draper and Mr Mick McManus who were representing FTI Consulting Pty Ltd (FTI Consulting) and Passage Holdings Pty Ltd (Passage Holdings) respectively. The purpose of the inspection was to evaluate compliance with environmental authority (EA) EPPR00576713.

While undertaking the inspection, EHP identified a number of non-compliances with EA EPPR00576713 along with an area of concern which are outlined as follows:

Condition number	Detail of non-compliance
Condition A1-1	Condition:
	The holder must install all measures, plant and equipment necessary to ensure compliance with the conditions of the EA, maintain such elements in a proper and efficient condition and operate such elements in a proper and efficient manner.
	<u>Justification/Recommended action</u> During the inspection, EHP officers noted that significant remedial works have been undertaken by Passage Holdings since EHP's previous inspection on 05 February 2015.
	Furthermore, on 27 January 2016, Passage Holdings provided EHP with an update on the ongoing remedial actions. In summary, EHP notes the following:
	A Site Based Management Plan has been developed and is currently being implemented,
	All plant alarms are fully functional and the dial out system is operational to

Table 1: Details of Non-Compliance with EA EPPR00576713

	alert the plant manager of alarms if not on-site,
	All warning lights are now working,
	 New chlorine dosing pumps and pipework have been installed and are now operational, and
	 The irrigation area and system are now fully operational.
	Despite the above remedial actions, EHP considers that Passage Holdings has not yet installed all plant and equipment necessary to ensure compliance with this condition. Specifically, EHP notes that the roof of the wet weather storage tank remains damaged and open to the element which allows rainfall to enter the tank, whereby reducing the tanks capacity to store effluent.
	Passage Holdings has advised EHP that the company has experienced problems locating a contractor to quote and/or complete the work. Passage Holdings has further advised that a temporary fix is currently being investigated while a contractor is sought. EHP encourages this approach.
Condition A3-2	Condition:
	The development permit only authorises sewage treatment for a maximum daily inflow volume of 412 kilolitres.
	<u>Justification/Recommended action</u> Passage Holdings confirmed that the flow meter at the STP is not operational. During the inspection, Passage Holdings advised that a new flow meter is being sourced.
Condition	Condition:
C8-1	A groundwater monitoring program must be developed and implemented prior to the commencement of operations of the sewage treatment system, which will effectively detect the presence of and extent of contamination of groundwater from the treated effluent irrigation area as detailed in Schedule F.
	<u>Justification/Recommended action</u> EHP notes that a Groundwater Monitoring Program has not been developed or implemented for the site. However, EHP acknowledges that Passage Holdings has undertaken and provided results for groundwater monitoring undertaken at the site on 28 January 2016. Passage Holdings also advised that results were believed to be compromised due to the quality of bores. EHP understands that the samples were collected from two separate bores and that results showed inconsistencies between the two.
	The ARIAST report states that the inconsistencies between the two bores indicate that the bores were located incorrectly and that the bore locations should be revised. The ARIAST report further states that the results show significant groundwater contamination due to the release of treated effluent from the STP or other external sources and recommends that a separate environmental investigation be completed.
	The Site Based Management Plan for the Port Hinchinbrook STP states that a detailed Groundwater Monitoring Program (identifying suitable location, depth, sample point requirement, sampling condition etc.) must be prepared for the site.

	On 08 February 2016, EHP requested a status update from Passage Holdings in relation to this matter. Passage Holdings responded to EHP and advised that they undertook some ground water monitoring, however were concerned that results were inconsistent due to the bore holes.
	Passage Holdings further advised that they are in discussion with a consultant to confirm that the locations and depth of the bores are appropriate and would hope to have the bores operating correctly in the next six weeks and monitoring to follow on from this at the beginning of April.
	Condition:
Condition F2-1	The only contaminants permitted to be released to land is treated effluent to the areas as shown in Figure 1 Schedule I in compliance with the limits levels stated in Table 1 of the Land Schedule and the conditions of this authority.
	<u>Justification/Recommended action</u> Passage Holdings has undertaken and provided monitoring results (refer to ARIAST report no. PN1502003S and PN1509007L) for sampling undertaken on 28 October 2015 and 11 November 2015 from the treated effluent storage tank. During the inspection, EHP officers were advised that the treated effluent held within the storage tank had not been irrigated to land as monitoring results had shown the effluent exceeded the limits outlined in the EA. EHP supports the approach of storing this effluent until sampling shows the effluent quality is within the limits outlined in the EA, and therefore suitable for irrigation.
	During the inspection, EHP officers collected samples from the treated effluent storage tank. Sampling results indicate that overall the treated effluent has improved since the previous month however the effluent remained non-compliant for all parameters with the exception of faecal coliforms. A summary of EHP sampling results indicate:
	 Faecal Coliforms were compliant with limits,
	 Total Phosphorous was slightly elevated and non-compliant, and
	 Biological Oxygen Demand, Total Nitrogen, Suspended Solids were elevated and non-compliant.

It is an offence under section 430 of the *Environmental Protection Act 1994* to contravene a condition of an environmental authority and significant penalties apply.

EHP reminds FTI Consulting that an Environmental Protection Order (EPO) (reference STAT760) remains in effect for the site. However, EHP acknowledges that Passage Holdings has undertaken substantial work at the site which has achieved compliance with 12 of the 16 EPO requirements. Accordingly, EHP notes that FTI Consulting remains non-complaint with four requirements of the EPO, the most significant of these being the completion of repairs to the storage tank. EHP reminds FTI Consulting that the remaining requirements must be completed to allow the EPO to be finalised.

EHP reserves the right to take further compliance action if further information comes to light which escalates the seriousness of the identified non-compliances.

Area of Concern

During the inspection the following area of concern was identified and requires attention.

Issue	Area of concern
1	Wet Weather Storage Tank During the inspection it was identified that Passage Holdings stores the treated effluent in the Wet Weather Storage Tank until the effluent quality meets the limits outlined in condition F2-1 of the EA. When the treated effluent does not meet the required quality parameters for release, the effluent is re-circulated through the plant for further treatment.
	During the inspection EHP officers advised Passage Holdings that this practice reduces the freeboard of the tank and therefore its capacity in the event of wet weather. Therefore, this practice increases the risk of the tank overflowing and releasing influent/effluent to the receiving environment.
	Justification/Recommended Action
	EHP recommends that back up/emergency procedures be put in place to manage any potential overflow event i.e. consider vacuum trucks to be on standby to pump from the tank and consider planning on where the effluent may be disposed.

EHP considers the identified non-compliances and area of concern identified above to be serious matters. FTI Consulting is required to rectify the identified non-compliances and the area of concern. EHP requests FTI Consulting provide a written response including any updates regarding the matters outlined above by close of business Friday 18 March 2016 detailing the actions proposed and associated time-frames to rectify the identified non-compliances and the area of concern highlighted.

FTI Consulting is advised that section 430 of the *Environmental Protection Act 1994* outlines that it is an offence to contravene a condition of an environmental authority. The maximum penalty for this offence is \$512,325.

In accordance with EHP's enforcement guidelines, the department would like to afford you the opportunity to provide a written response detailing any mitigating circumstances that may exist. EHP will consider any response received when determining what action to take in relation to the matter. Please provide a written response to the department by close of business on Friday 18 March 2016.

Wet Season

As we are within the wet season, EHP would also like to remind FTI Consulting and Passage Holdings to continue to prepare for wet weather by familiarising yourself with the conditions of your EA and to regularly review Bureau of Meteorology updates to receive the latest information predicted for rainfall in the local area. This information is available on the Bureau of Metrology website at <u>www.bom.gld.gov.au</u>.

FTI Consulting and Passage Holdings are also reminded of the obligations set out in section 319 of the *Environmental Protection Act 1994* which sets out the general environmental duty and requires anyone who carries out an activity that causes, or is likely to cause environmental harm, to take all reasonable and practical measures to prevent or minimise the harm. In that regard, you are encouraged to actively identify all environmental risk factors associated with the activities at the sites on an ongoing basis, and to implement strategies and processes to effectively manage them.

Should any event occur that threatens or causes material or serious environmental harm, be advised that under the conditions of your EA, as well as pursuant to section 320 of the *Environmental Protection Act 1994*, FTI Consulting and Passage Holdings Pty Ltd has a duty to notify EHP of such events. Further information on your duty to notify requirements is available on the EHP website (<u>www.ehp.qld.gov.au</u>), and should an event occur, please contact EHP's pollution hotline on 1300 130 372.

Should you wish to discuss any of the matters raised in this letter, please liaise with Nina Henney, who can be contacted by 4722 5303 or at <u>nina.henney@ehp.qld.gov.au</u>.

Yours sincerely,

MA CA

Mark Cavicchiolo Compliance Delivery Manager, North Queensland Compliance Environmental Services and Regulation Department of Environment and Heritage Protection