



**Response to Queries/Clarifications  
from Design Engineer  
to the Sydney Tar Ponds Agency**

**Tender #** STPA2008S-22  
**Tender Title:** Flow Diversion – TP6A  
**Date:** 25 November 2008  
**To:** Jerome MacNeil, Contract Manager  
**From:** S. Kelly

---

**Query/Clarification:** Questions to the Agency

The text following the query is redacted with two large black bars.

• Can the Sydney Tar Ponds Agency (STPA) clarify that the Contractor shall be responsible for all utility costs (including electricity and diesel for backup generators) associated with operating each of the four pump stations under this tender?

**Response:** See Addendum Number 2, Paragraph 8).

• Can the STPA provide the Bidders with a point of contact at Nova Scotia Power who is familiar with the existing electrical conditions?

**Response**

Paul Breski  
Sr Engineering Technologist  
902 564 6774 ext 3428  
Cell 902 578 1308  
[paul.breski@nspower.ca](mailto:paul.breski@nspower.ca)

Peggy MacLellan  
Customer Coordinator  
902 564 6774 ext 3434  
[margaret.maclellan@nspower.ca](mailto:margaret.maclellan@nspower.ca)

Fax: 902 567 3162

## **Response to Queries/Clarifications from Design Engineer to the Sydney Tar Ponds Agency**

- If the Silt Curtains are installed as designed and do not withstand the tidal fluctuations from the harbour, who will be responsible for the cost of replacement?

**Response:** The Assignment Environmental Protection Plan, Section 3.2.1 states: to control the dispersal of sediments into the surrounding downstream environment or into the Sydney Harbour, two silt curtains and an oil absorbent boom will be installed on the outfall side of the energy dissipation outlet structures according to the protocols outlined in Section 3.2.1. The requirement for the silt curtains and oil boom at Battery Point is for Phase III only.

**The contractor is responsible for installation and maintenance of the silt curtain and oil boom. If the contractor has alternative ways and means to meet the requirements of the Assignment Environmental Protection Plan, Specification 01 23 10 Substitutions applies.**

- Bid items 17.1 through 17.4 are unit prices per day of pump operation. Please confirm that this is measured in calendar days including Saturdays, Sundays and Holidays.

**Response: This is confirmed.**

- Specification Section 11 01 60 part 2.2 specifies the peak flow design requirements. Who would be responsible for damages to the work area to other contractors if flows exceed the peak flow design and breach the Contractor's constructed dam?

**Response:** The TP 6A Contractor is responsible for design of the pumping system in accordance with Specification 11 00 60 Bypass Pumping Systems and for the operation of the system in accordance with Specification 11 01 59 Operations Sequence of Temporary Pumping System. If incoming flows exceed the specified values and water enters another contractor's work site, the TP6A Contractor is not responsible as long as the pumping system performed as required. However, if flooding occurs as a result of a pumping station design or operation that does not meet the specified flows, then it is the TP 6A Contractor's responsibility for reinstatement.

- Article IV of the Form of Agreement states that the Contractor will be liable for supervision and additional fees incurred by the Agency during a delay. The article further states that the amount of liquidated damages is \$5000 per day. Is the liquidated damage amount (i.e., \$5,000 per day) the maximum amount to be paid for a Contractor caused delay? Please clarify.

**Response: As per Addendum 2**

## Response to Queries/Clarifications from Design Engineer to the Sydney Tar Ponds Agency

If the Contractor fails to meet any scheduled milestone completion date or substantial performance of the Contract as specified in the Contract Documents and as determined by the Design Engineer, this will be deemed a Period of Delay. In the event of a Period of Delay, the Contractor agrees to pay the Agency liquidated damages in the amount of five thousand dollars (\$5000) for each calendar day of the Period of Delay that the milestone completion or substantial performance of the Contract remains outstanding, as determined by the Design Engineer. The Contractor and the Agency agree that the amount stated above is the best pre-estimate of loss to the Agency in the event of a Period of Delay, and that it is not intended to be, nor is it to be interpreted as, a penalty.

• The Milestone schedule distributed with the Tender shows an award date of November 28, 2008. At the Tender meeting it was noted that the award would not happen on that date. The schedule shows pre-construction submittals due by December 18 with field work to start on December 19. It appears that the project milestones shown on page 7 are based on an award date of November 28, 2008. Will the milestone schedule be adjusted to reflect the actual award date?

**Response: The updated schedule is as per Addendum 2.**

• Bid Item 3 provides for Collection of Wastewater with an Estimated Quantity of only 1 m<sup>3</sup>, can the STPA kindly explain the rationale for this bid quantity? Does the STPA have a calculation for the actual quantity expected for this Tender?

**Response: Addendum 2 has addressed this question.**

• Are there any schedule restraints for performing in-stream work within the Wash Brook?

**Response: There are neither schedule constraints nor seasonal restrictions.**

• Can the STPA confirm that the “*Access Roads Constructed by Others*”, as depicted on the contract drawings, will be constructed prior to the start of construction of this Tender?

**Response: A separate contract for the Access Roads is presently underway and the Access Roads will be in place prior to 6A construction. Typical cross-sections have been included as part of Addendum 2.**

• The designs of the pump stations do not appear to have any means of preventing sediment build up from occurring in the wet well areas. Since the creek and channels will drain directly into the areas that we are to be pumping from, is sediment build up not expected to be a factor? In the event that the wet well areas become built up with sediment, will the Contractor be reimbursed for having to remove the pumps and muck out the areas and replace the pumps? If so, under which pay item?

**Response: Maintenance of the pumping system is considered to be part of proper operations. Accordingly, maintenance of the pump stations, including removal of any sediment that is allowed to deposit, is to be included in the existing pay item for operations.**

## Response to Queries/Clarifications from Design Engineer to the Sydney Tar Ponds Agency

- Does paragraph 1.3 in Section 01 61 00 of the specifications refer to the materials that will be used in constructing the pump stations or only to materials that are permanently incorporated into the project?

**Response.** It refers only to materials that are permanently incorporated into the project. It is fully expected that some material (i.e. sheet pile, piping) will be re-used.

- Please provide details of all existing items to be demolished in accordance with Section 02 41 16 of the specifications. Paragraph 3.1 refers to the items generally, but there are no drawings that specifically identify the items, dimensions, volumes, etc. to be demolished.

**Response:** As per 02 41 16 demolish weir at Ferry Street; exiting pipe bridge will be temporarily removed, and concrete pads demolished. As per DWG N 101, demolish and remove existing wharf.

- What are the demolition limits of the pump stations? Section 01 22 00 states "...to the satisfaction of the Design Engineer.", however that leaves much uncertainty, for example:
  - o Is all cast in place concrete used to construct the pump station floor slabs to be demolished and removed?

**Response:** Cast in place concrete pump station floor slabs have to be demolished and removed only at Battery Point. Cast in place concrete pump station floor slab at Battery Point shall be demolished and removed to allow for the construction of the new channel bottom. The pump station floor slabs at Wash Brook, Ferry Street and Narrows can remain.

- o Are the perimeter ditches and liner to be removed following completion of each Phase? If so, what is the final grade along the ditch line?

**Response.** Filling in of the perimeter ditch is the responsibility of the 6B Contractor. The 6A Contractor will remove the liner (possibly for reuse).

- o In general, can the sheet piles and/or H-piles be cut off below grade and buried? If so, how far below grade?

**Response:** In general, it is acceptable to cut off below grade and bury the steel sheet piles and H-piles. The cut-off elevations have to be a minimum of 450 mm below the elevation of the HDPE liner of the new channel and shall be at or below the elevations provided below:

Cut-off elevation at Ferry Street: -2.3m

Cut-off elevation at Narrows: -2.6m

Cut-off elevation at Battery Point: -2.8m

- o Is the stone placed in Wash Brook Channel to remain?

**Response:** Yes

**Response to Queries/Clarifications  
from Design Engineer  
to the Sydney Tar Ponds Agency**

o Are the sheet piles that will replace the existing sheet piles on the West side of Wash Brook Channel to be removed following completion of Phase 1

**Response: No. The sheet piles are to remain in place.**

o Are the existing sheet piles along both sides of Wash Brook Channel that remain in place during Phase 1 construction removed at the end of Phase 1? Do these become the property of the Contractor?

**Response: No. The sheet piles are to remain in place.**

o Is the Battery Point discharge structure to be demolished following the completion of Phase 3?

**Response: Yes.**

• Since bypass pumping operations will operate 24/7, will the Contractor be required to staff the project with a H&S Supervisor on site for all hours of operation?

**Response: H & S Supervisor to work normal hours but a response mechanism is to be in place for the off hours.**

• Section 05 12 33 Section 2.1 specifies that all structural sections should be site primed. Does that apply to the structural steel to be used in the temporary pump stations? Please specify as to what, if any steel needs to be painted.

**Response: All structural steel including the structural steel used in the temporary pump stations have to be shop or site primed. No painting is required.**

• Section 11 01 60 Paragraph 2.2 specifies the design discharges for the cut-off ditches. Are these during peak or design flow? Please provide the flow for the missing case as applicable?

**Response: The flow in Specification Section 11 01 60 Paragraph 2.2 is the peak flow to be handled by the ditches.**

• The Environmental Protection Plan states that all perimeter ditch collections should be collected and stored for treatment. There are no details indicating the termination of the cut-off ditches. Are they to be terminated and pumped into storage for disposal? Please provide details of ditch terminations?

**Response: Termination of ditches is shown on the drawings as rounded at the ends. Pumping of these ditches can occur where it is convenient to pump to the nearest inlet or outlet structure.**

• What are the seasonal flow rates of Wash Brook and Coke Oven Brook, such that we can determine the requirements for the temporary maintenance pumping during construction and dewatering of the pump stations?

## **Response to Queries/Clarifications from Design Engineer to the Sydney Tar Ponds Agency**

**Response:** Flow duration curves for the 2 brooks, for each month of the year are available and are provided as an attachment.

• Section 11 01 59 Paragraph 1.6.4 implies that the Contractor is responsible for the “flow path” between Wash Brook/Coke Ovens and the Sydney Harbour with respect to it being the mitigating factor to preventing flooding risks outside the project boundaries. Please clarify the intent of this paragraph as the TP-6A Contractor does not have any impact on the construction or maintenance of the channel or the design of the channel and its relationship to the pump stations?

**Response:** Although the TP 6A Contractor does not have control of the channel design, the contractor for TP6A does have control over the pumping station configurations, and must ensure that there is an open flow path available for water to flow at these locations, with an opening not smaller than shown on the drawings . The TP 6A Contractor is responsible for design of the pumping system in accordance with Specification 11 00 60 Bypass Pumping Systems and for the operation of the system in accordance with Specification 11 01 59 Operations Sequence of Temporary Pumping System. The TP6A Contractor does not have any impact on the construction or maintenance of the channel or the design of the channel and its relationship to the pump stations.

• Drawings S-303 & S-304 show a storm sewer with manholes and an approach trestle that appears to be entering the Ferry Street pump station from the East however there are no corresponding details or instructions. Is this existing or new? Please provide clarification and any details necessary for either retro-fitting or constructing the sewer, manholes and trestle.

**Response:** Storm sewers and manholes entering Ferry Street Pump Station from the East are shown on Drawing C-210.

• Does Pay Item 8.1 include all sediment and rock excavation necessary in Wash Brook for the construction of the pumping station? If not please specify limits.

**Response:** Yes, Pay Item 8.1 includes all sediment and rock excavation necessary in Wash Brook for the construction of the pumping station.

• Pay Item 15 is for the installation of 1,300 m of security fence, however it does not appear to be located on any of the drawings. Can STPA clarify as to where the location of this security fence will be?

**Response.** The location of the security fencing is not shown on the drawings. It was estimated that the contractor may have to install security fencing as part of the project requirements, and was therefore included

• Will the bypass pumping required for the installation of the Wash Brook and Coke Oven Brook be paid under Pay Item 17?

**Response:** No, it will be paid under Item 16.

## Response to Queries/Clarifications from Design Engineer to the Sydney Tar Ponds Agency

- Topsoil is specified in Section 32 91 21, however there are no indications in the drawings as to where topsoil will be applied. Please clarify.

**Response: There is no specific area. The work area is large, and topsoil was specified as this may be required in accomplishment of the work.**

- Section 3.6 of the Master Health and Safety Plan states, "contractors will be required to carry out monitoring for potentially harmful vapours and dust on a continuous basis when known or suspected contaminated material is disturbed." Does the pumping of water constitute suspected contaminated material? And further within this section is it required that down and upwind monitoring will be performed by the Contractor during all intrusive activities?

**Response: Section 3.6 of the MHASP (Revision F) does not contain the requirement for down and upwind monitoring with regard to determining contaminant levels for occupational exposures. The purpose of the air monitoring detailed in Section 3.6 is to ensure workers are not exposed to contaminants in concentrations that exceed the accepted occupational limits. At the suction point of the pumping system, it is not anticipated that the removal of water would generate measurable levels of VOCs (particulate levels would obviously not be a concern). At the discharge point, the Contractor would need to demonstrate that operation does not generate VOC levels that are in excess of occupational limits (in the case of VOCs, the TLV-TWA for benzene (0.5ppm) is to be used) when workers are present in close proximity (> 10m) to the discharge point. Continuous monitoring would therefore not necessarily be required. The Contractor however would need to initially prove that contaminant levels are below occupational limits, and monitor routinely (if workers are present) to verify the initial findings. How this will be accomplished should be detailed in the Contractor's AHASP.**

- Section 3.6 of the Master Health and Safety Plan also states that a direct reading instrument capable of measuring airborne particulates of respirable size. It then references a PM10 size. What instrument is required for this monitoring (e.g., a PM10 capable monitor or an instrument such as a PDR manufactured by MIE for dust monitoring)?

**Response: Any instrument with the capability to make a determination of aerosol matter concentrations having a diameter of 10 microns or less, with both direct reading and data logging capacity is acceptable.**

- What levels of contaminants are expected in the material to be excavated under this Contract?

**Response: Refer to Specification 00 31 32 Additional Reports and Documents.**

- Where are the noise levels measured by STPA on and off site? Are these locations fixed stations?

**Response to Queries/Clarifications  
from Design Engineer  
to the Sydney Tar Ponds Agency**

**Response:** The STPA does not currently measure noise levels. Baseline noise data was established in the *Remediation of Sydney Tar Ponds and Coke Ovens Sites Environmental Impact Statement (EIS)*. A figure showing baseline noise monitoring locations is provided in Figure 4-1, Section 4.2, Noise Monitoring, of the Detailed EPP. Noise readings during this work were undertaken over a 7-day period using a Quest 2900 handheld sound level meter. During TP6A, appropriate noise monitoring locations will be selected by the TP6A Contractor(s) based on scheduled daily construction activities, according to Section 4.2 of the Detailed EPP.”

**Queries from November 12, 2008 letter**

**Query/Clarification:** Questions submitted [REDACTED]

• Can the STPA provide a connection detail for sealing off the Battery Point cutoff wall to the existing cells?

**Response:** A connection detail will be provided in Addendum 3, and the Contractor will be allowed to propose options for review.

• Can the STPA provide a specification for *Pay Item 18 – Grouting*?

**Response:** See Specification Section 31 63 18 – Clause 3.4.

• Can the STPA provide drawings and details for *Pay Items 19.1 & 19.2*?

**Response:** These are provisional items. The only known existing structure is the wharf shown on DWG N101 and drawings or details are not available. Pay Item 19.2 is for any encountered structure (presently unknown).

• Will all rock socket and H-pile installations be paid under *Pay Item 20 & 21* or are they a contingency item for overruns? For example, will the rock sockets required to construct the Wash Brook pump station Type 1 wall be paid under *Pay Item 20 & 21* or *Pay Item 8.2*?

**Response:** This item is addressed in Addendum 2.

• The description of *Pay Item 15 - Install/Remove Security Fencing (new)* does not actually include the effort to remove the fence. It states that the item only includes installing new fence with no description to remove any fencing. Please clarify.

**Response.** The location of the security fencing is not shown on the drawings. It was estimated that the contractor may have to install security fencing as part of his requirements and was therefore included. The eventual removal will be included as part of Addendum 3.

**Response to Queries/Clarifications  
from Design Engineer  
to the Sydney Tar Ponds Agency**

• Typical Section C on Sheet TP6-DWG-S-402 does not indicate that there is an existing roadway on top of the causeway. Is the Ferry Street road along the top of the causeway to be replaced in kind? If so, please provide details for re-constructing the roadway including sub-base and asphalt or concrete pavement design, curb details, drainage details, etc.

**Response: Ferry Street Bridge and Causeway to be reinstated under separate contract by others.**

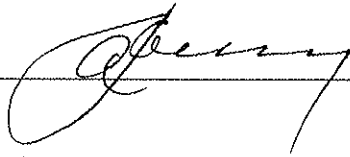
• Can on-site slag be used for the earthen cofferdam shown on Detail 2/Sht. TP6-DWG-P-332? If not, please provide a specification for the material to be used for the coffer dam's granular material.

**Response: Yes**

Does this query/clarification warrant an Addenda?     Yes     No.

*Addendum Notification STPA Form F 60800 for Addendum Number 3 will follow.*

Signature: \_\_\_\_\_



Date: \_\_\_\_\_

25 NOV 2008

Attachment: Flow Diversion Curves TP 6A