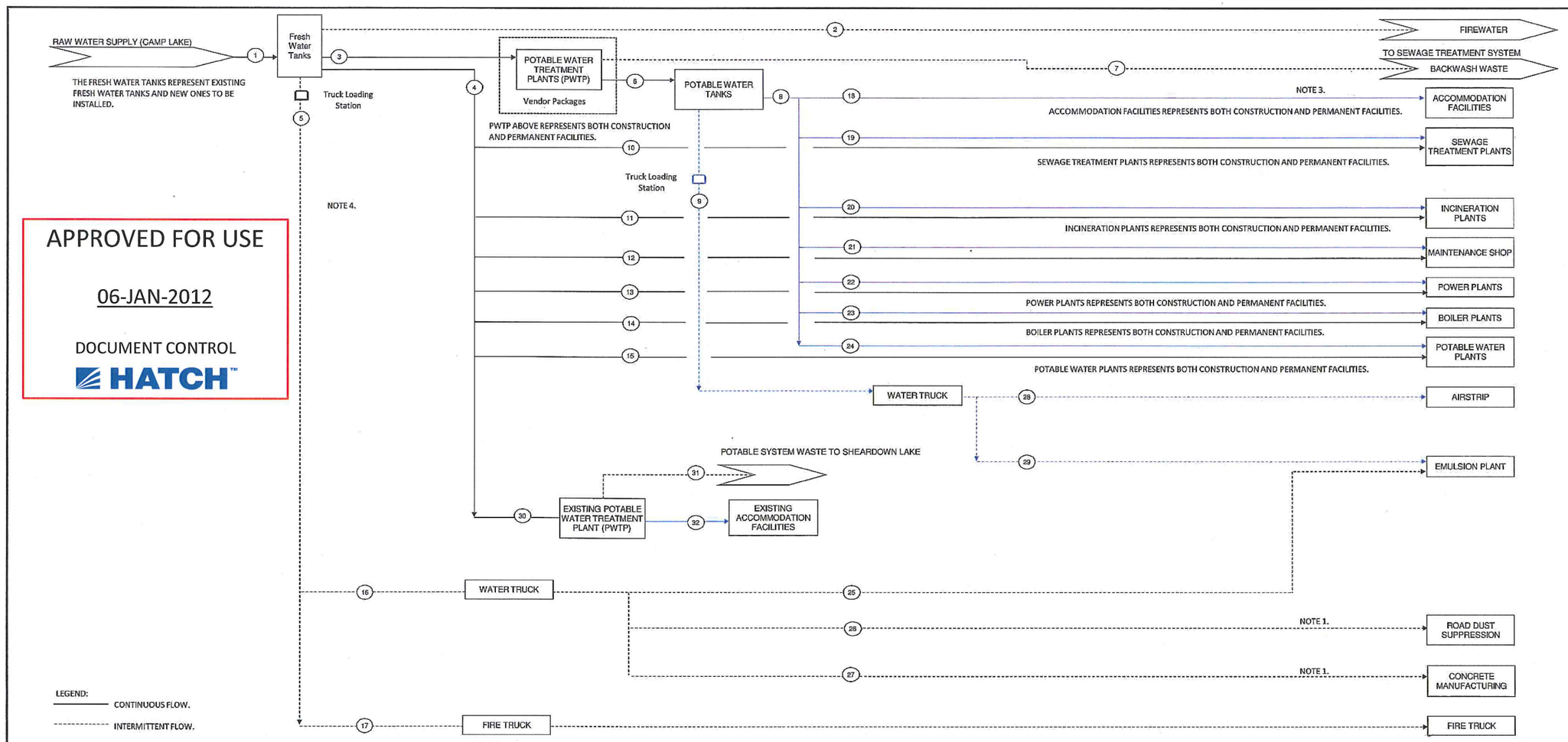

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06-JAN-2012

DOCUMENT CONTROL

HATCH™

NOTES:

1) The flows for these streams will occur in the summer time only.
2) The flow values on this water balance have been derived from previous consultants documentation produced during the earlier phase of the project. Where values were missing Hatch estimations are used.
3) The peak flows for the accommodation facilities were determined using a peaking factor. The accommodation complex represents both the construction and permanent facilities.
4) The division of trucked and piped facilities is based upon the proximity of the various facilities as indicated on layouts prepared by Hatch.

Stream No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stream Description	RAW WATER FEED	FIRE-WATER	FEED TO POTABLE SYSTEM	PIPED FRESH WATER	TRUCKED FRESH WATER	POTABLE SYSTEM PRODUCT FLOW	POTABLE SYSTEM WASTE FLOW	PIPED POTABLE WATER	TRUCKED POTABLE WATER	WASH WATER TO STP	WASH WATER TO INCIN. PLANT	WASH WATER TO MAINT. SHOP	WASH WATER TO POWER PLANT	WASH WATER TO BOILER PLANT	WASH WATER TO PWTP	FRESH WATER TRUCK
Construction Phase - Design (m^3/h)	27.3	300.0	13.8	31.0	42.9	13.8	0.00	60.7	42.9	3.4	3.4	12.1	3.4	3.4	3.4	42.9
Construction Phase - Nominal (m^3/h)	27.3	-	13.8	6.6	6.9	13.8	0.00	13.5	0.3	0.1	0.1	4.4	0.1	0.1	0.1	6.6
Operation Phase - Design (m^3/h)	14.7	300.0	6.9	41.7	42.9	6.9	0.00	24.0	42.9	3.4	3.4	22.8	3.4	3.4	3.4	42.9
Operation Phase - Nominal (m^3/h)	14.7	-	6.9	7.2	0.6	6.9	0.00	6.7	0.1	0.1	0.1	5.0	0.1	0.1	0.1	0.5
Stream No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Stream Description	FIRE WATER TRUCK	POTABLE WATER TO ACC. COMPLEX	POTABLE WATER TO STP	POTABLE WATE TO INCIN. PLANT	POTABLE WATER TO MAINT. SHOP	POTABLE WATER TO POWER PLANT	POTABLE WATER TO BOILER PLANT	POTABLE WATER TO PWTP	FRESH WATER TO EMULSION PLANT	FRESH WATER FOR ROAD DUST SUPPRESS	FRESH WATER FOR CONCRETE MFG.	POTABLE WATER FOR AIRPORT	POTABLE WATER FOR EMULSION PLANT	FEED TO EXISTING PWTP	WASTE FROM EXISTING PWTP	EXISTING PWTP PRODUCT
Construction Phase - Design (m^3/h)	42.9	59.4	0.1	0.06	0.7	0.1	0.06	0.1	42.9	42.9	42.9	42.9	42.9	1.9	0.0	1.9
Construction Phase - Nominal (m^3/h)	0.0	12.1	0.12	0.06	0.7	0.1	0.06	0.1	0.13	0.4	6.3	0.1	0.2	1.5	0.0	1.5
Operation Phase - Design (m^3/h)	42.9	23.3	0.06	0.03	0.4	0.06	0.03	0.06	42.86	42.9	0.0	42.9	0.0	1.9	0.0	1.9
Operation Phase - Nominal (m^3/h)	0.0	6.1	0.06	0.03	0.4	0.06	0.03	0.06	0.10	0.42	0.00	0.06	0.06	1.5	0.0	1.5

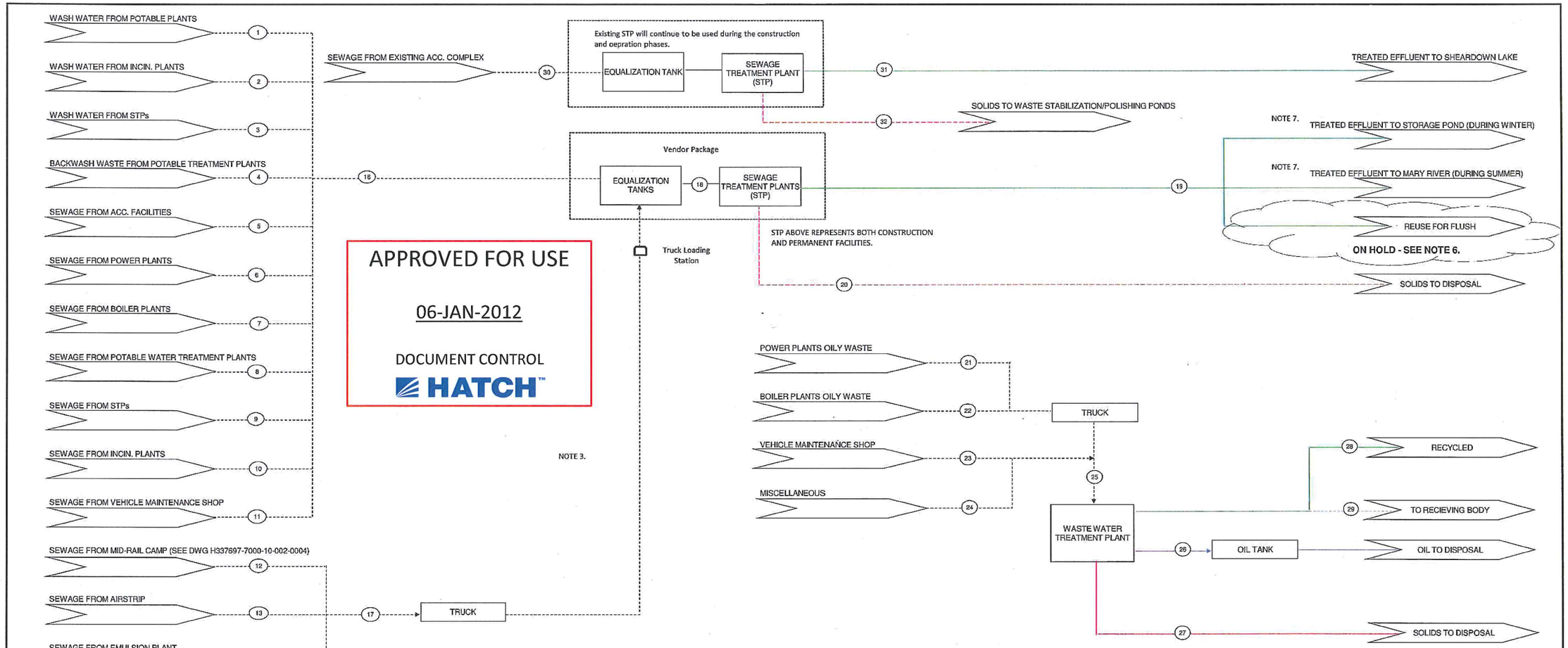
REGISTERED PROFESSIONAL ENGINEER
J.N. CASSON
LICENSEE
DEC 23/11
NTINU

HATCH™ | Baffinland iron mines corporation

DESIGNED BY: R. KAPADIA Date: 12/21/2011	DRAWN BY: R. KAPADIA Date: 12/21/2011
CHECKED BY: J. BINNS Date: 12/21/2011	DISCIP ENGR.: R. KAPADIA Date: 12/21/2011
PROJ. DES. COORD.	PROJ. ENGR.: J. CASSON Date: 12/21/2011
PROJECT MANAGER: H. CHARALAMBU Date: 12/21/2011	Drawing No.: H337697-4210-10-002-0001 SHEET 1 OF 2

MINE SITE - MARY RIVER PROJECT
BLOCK FLOW DIAGRAM
WATER SUPPLY BALANCE

Rev. F



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DOCUMENT CONTROL

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NOTES:

1) The flow values on this water balance have been derived from previous consultants documentation produced during the earlier phase of the project. Where values were missing Hatch estimations are used.
2) The peak flows for the accommodation facilities were determined using a peaking factor.
3) The division of trucked and piped facilities is based upon the proximity of the various facilities as indicated on layouts prepared by Hatch.
4) It has been assumed that relative sewage flows will be distributed through different facilities in the same proportions as the relative potable water flows.
5) Sewage will be drained from a local collection tank at each remote location
6) Effluent reuse is optional. To be reviewed in detailed engineering.
7) Treated effluent shall meet discharge criteria based upon Nunavut Water Board licence requirements and the Canadian Guidelines for Domestic Reclaimed Water for Use in Toilet and Urinal Flushing.

Stream No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stream Description	WASH WATER FROM POTABLE PLANT	WASH WATER FROM INCIN. PLANT	WASH WATER FROM STP	PWTP BACKWASH WASTE STREAM	SEWAGE FROM ACC. COMPLEX	SEWAGE FROM POWER PLANT	SEWAGE FROM BOILER PLANT	SEWAGE FROM PWTP	SEWAGE FROM STP	SEWAGE FROM INCIN. PLANT	SEWAGE FROM MAINT. SHOP	SEWAGE FROM MID-RAIL CAMP	SEWAGE FROM AIRSTRIP	SEWAGE FROM EMULSION PLANT	SEWAGE FROM RAVN CAMP	PIPED SEWAGE
Construction Phase - Design (m^3/h)	3.4	3.4	3.4	0.00	68.1	0.1	0.1	0.12	0.1	0.1	0.74	42.9	42.9	42.9	42.9	79.5
Construction Phase - Nominal (m^3/h)	0.1	0.1	0.1	0.00	12.4	0.1	0.1	0.12	0.1	0.1	0.74	2.9	0.1	0.1	6.3	14.1
Operation Phase - Design (m^3/h)	3.4	3.4	3.4	0.00	36.6	0.06	0.03	0.06	0.06	0.03	0.37	-	42.9	42.9	0.0	47.4
Operation Phase - Nominal (m^3/h)	0.1	0.1	0.1	0.00	6.0	0.06	0.03	0.06	0.06	0.03	0.37	-	0.1	0.1	0.0	7.0
Stream No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Stream Description	TRUCKED SEWAGE	STP FEED FLOW	STP EFFLUENT - DISCHARGED	STP SOLIDS TO DISPOSAL	POWER PLANT - OILY WASTE	BOILER PLANT - OILY WASTE	MAINT. SHOP - OILY WASTE	MISC. OILY WASTE	TOTAL FEED TO WWTP	OIL TO DISPOSAL	WWTP SOLIDS TO DISPOSAL	RECYCLED WASH WATER	WWTP EFFLUENT TO DISPOSAL	EXISTING ACC. COMPLEX SEWAGE	EXISTING STP EFFLUENT	EXISTING STP SOLIDS
Construction Phase - Design (m^3/h)	42.9	23.5	23.3	1.0	3.4	3.4	12.1	1.9	20.8	0.0	n/a	20.73	20.7	1.9	1.9	0.0
Construction Phase - Nominal (m^3/h)	9.4	23.5	23.3	0.2	0.1	0.1	4.4	0.5	5.1	0.0	0.82	4.32	0.0	1.5	1.5	0.0
Operation Phase - Design (m^3/h)	42.9	7.2	7.1	0.7	3.4	3.4	22.8	3.0	32.6	0.0	n/a	32.53	32.5	1.9	1.9	0.0
Operation Phase - Nominal (m^3/h)	0.1	7.2	7.1	0.1	0.1	0.14	5.0	0.5	5.8	0.0	0.92	4.87	0.0	1.5	1.5	0.0

REGISTERED PROFESSIONAL ENGINEER J.V.CASSON LICENSEE Dec 23/11 NT/NU

HATCH™ Baffinland Iron Mines Corporation

DESIGNED BY R. KAPADIA Date: 12/21/2011	DRAWN BY R. KAPADIA Date: 12/21/2011
CHECKED BY J. BINNS Date: 12/21/2011	DISCIP ENGR. R. KAPADIA Date: 12/21/2011
PROJ. DES. COORD.	PROJ. ENGR. J. CASSON Date: 12/21/2011
PROJECT MANAGER H. CHARALAMBU Date: 12/21/2011	Drawing No. H337697-4210-10-002-0001 SHEET 2 OF 2

MINE SITE - MARY RIVER PROJECT
BLOCK FLOW DIAGRAM
WASTE WATER BALANCE

Rev. F