Wands Michael Form 3 November 06, 2017

FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL

OMB Number:

3235-0104

Expires:

January 31, 2005

Estimated average burden hours per

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF

SECURITIES

response... 0.5

(Print or Type Responses)

1. Name and Address of Reporting 2. Date of Event Requiring 3. Issuer Name and Ticker or Trading Symbol Person * Statement PUTNAM MASTER INTERMEDIATE INCOME Wands Michael (Month/Day/Year) TRUST [PIM] 10/30/2017 (Last) (First) (Middle) 4. Relationship of Reporting 5. If Amendment, Date Original Person(s) to Issuer Filed(Month/Day/Year) **PUTNAM** (Check all applicable) INVESTMENTS. ONE POST **OFFICE SQUARE** Director 10% Owner (Street) X_ Officer _X__ Other 6. Individual or Joint/Group (give title below) (specify below) Filing(Check Applicable Line) Head of Global Inv Strategies / _X_ Form filed by One Reporting Putnam Investments Person BOSTON, MAÂ 02109 Form filed by More than One Reporting Person (City) (State) (Zip) Table I - Non-Derivative Securities Beneficially Owned 4. Nature of Indirect Beneficial 1. Title of Security 2. Amount of Securities 3. (Instr. 4) Beneficially Owned Ownership Ownership (Instr. 4) Form: (Instr. 5) Direct (D) or Indirect (I) (Instr. 5) Reminder: Report on a separate line for each class of securities beneficially SEC 1473 (7-02) owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a

currently valid OMB control number.

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)	3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of	5. Ownership Form of Derivative	6. Nature of Indirect Beneficial Ownership (Instr. 5)
		(Instr. 4)	Price of	Derivative	
		Tr'al	Derivative	Security:	
		Title	Security	Direct (D)	

Date Expiration Amount or or Indirect
Exercisable Date Number of (I)
Shares (Instr. 5)

Reporting Owners

Reporting Owner Name / Address	Relationships

Director 10% Owner Officer Other

Putnam Investments

Wands Michael

PUTNAM INVESTMENTS
ONE POST OFFICE SQUARE
BOSTON, MAÂ 02109

 Â Head of Global Inv Strategies

Signatures

%

Michael Wands 11/06/2017

**Signature of Person Date

Reporting Person

Explanation of Responses:

No securities are beneficially owned

* If the form is filed by more than one reporting person, see Instruction 5(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. th:2.06%;">

% -28.4

Sudbury

Reporting Owners 2

39

108

51

2.8
%
-22.7
%
-28.4

PALLADIUM (000 oz troy)

72 59 66 144 125 11.9 % -8.0 % -13.3 % Sudbury 72 59 66 144 125

11.9
%
-8.0
%

GOLD (000 oz troy)

%

19 18 125 **37** -5.8 % -81.2 % -70.5 % Sudbury 95 19 18 125 37 -5.8 %

-81.2 %

SILVER (000 oz troy)

%

686

	567
	1,281
	1,162
%	-4.7
%	-17.3
%	-9.2
Sudbury	
	686
	595
	567
	1,281
	1,162
%	-4.7
%	-17.3

%

Cobalt production reached 693 t, 17% higher than 1Q12 and 8.2% above 2Q11.

Sudbury cobalt production in 2Q12 amounted to 166 t, down 40 t from 1Q12, mostly due to a longer than expected temporary suspension for safety assessment of mining operations.

Output from VNC, at 177 t in 2Q12, reflected production before stoppage, which occurred on May 10, when we declared force majeure after an incident in the acid plant. We expect no cobalt production in 3Q12.

In 2Q12, production of platinum and palladium was 105,000 troy ounces, 8,000 troy ounces higher than 1Q12.

FERTILIZER NUTRIENTS

Potash

000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	% change 2Q12/1Q12	% change 2Q12/2Q11	% change 1H12/1H11
POTASH	145	118	129	279	247	8.9%	-11.2%	-11.6%
Taquari-Vassouras	145	118	129	279	247	8.9%	-11.2%	-11.6%

Phosphates

	2Q11	1Q12	2Q12	1H11	1H12	% Change 2Q12/1Q12	% Change 2Q12/2Q11	% Change 1H12/1H11
PHOSPHATE ROCK	1,858	1,826	2,017	3,601	3,843	10.4%	8.5%	6.7%
Brazil	1,272	1,112	1,237	2,420	2,349	11.2%	-2.8%	-2.9%
Bayóvar	586	714	779	1,180	1,493	9.2%	33.1%	26.5%
MAP(1)	131	311	286	341	597	-8.3%	118.3%	75.3%
TSP(2)	175	241	213	408	454	-11.5%	21.6%	11.1%
SSP(3)	666	484	507	1,212	991	4.7%	-23.9%	-18.2%
DCP(4)	158	144	136	315	280	-5.5%	-14.1%	-11.1%

⁽¹⁾ Monoammonium phosphate

As our sales are primarily destined to the Brazilian market, where the demand for nutrients is more concentrated in the second half of the year, our production tends to be weaker in the first half.

Production of potash was 129,000 t in 2Q12, increasing 8.9% quarter-over-quarter and decreasing 11.2% year-over-year. The output increase reflected the improvement in infrastructure, the acquisition of equipment and the results of maintenance work in Taquari-Vassouras.

⁽²⁾ Triple superphosphate

⁽³⁾ Single superphosphate

⁽⁴⁾ Dicalcium phosphate

In 2Q12, total production of phosphate rock, which is used to feed the output of phosphate nutrients, achieved a record high figure, reflecting the ramp-up of Bayóvar. Total production of phosphate rock in 2Q12 was 10.4% higher than 1Q12. Output from Brazilian operations increased 11.2% on a quarterly basis, recovering from the maintenance stoppages and the rainy season in Brazil. Additionally, production from Bayóvar, which is ramping up, increased 9.2% over 1Q12.

The production of MAP (monoammonium phosphate) amounted to 286,000 t, down 8.3% on a quarter-over-quarter basis, due to the annual maintenance stoppage at Uberaba, which happened in June.

TSP (Triple superphosphate) production was 11.5% lower than 1Q12, also showing the effects of the maintenance work at Uberaba.

In 2Q12, the production of SSP (single superphosphate) was 4.7% higher than 1Q12, recovering from the maintenance stoppages in the Guará and Catalão units which took place in February 2012.

Table of Contents

DCP (dicalcium phosphate) production decreased 5.5% compared to 1Q12, showing production adjustments due to weaker demand.

• Nitrogen

000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	% change 2Q12/1Q12	% change 2Q12/2Q11	% change 1H12/1H11
AMMONIA	167	132	101	325	233	-23.4%	-39.5%	-28.1%
UREA	175	107	143	335	250	32.8%	-18.5%	-25.2%
NITRIC ACID	121	118	120	228	238	1.5%	-0.6%	4.4%
AMMONIUM NITRATE	114	119	124	217	242	4.2%	8.5%	11.8%

In 2Q12, ammonia production was 23.4% lower when compared to 1Q12, as a result of low availability of steam from the Araucária refinery. Urea production increased 32.8% when compared to 1Q12, recovering from a scheduled stoppage for maintenance, which took place in 1Q12.

The output of nitric acid and ammonium nitrate was 1.5% and 4.2%, respectively, higher than last quarter.

BULK MATERIALS

Iron ore

000 metric tons	2011	1Q12	2012	1H11	1H12	% change 2012/1012	% change 2012/2011	% change 1H12/1H11
IRON ORE	80,257	69,994	80,542	151,797	150,536	15.1%	0.4%	-0.8%
Northern System	26,019	21,711	27,362	48,670	49,073	26.0%	5.2%	0.8%
Carajás	26,019	21,711	27,362	48,670	49,073	26.0%	5.2%	0.8%
Southeastern System	30,528	26,759	28,296	59,222	55,054	5.7%	-7.3%	-7.0%
Itabira	10,499	8,154	9,184	19,581	17,338	12.6%	-12.5%	-11.5%
Mariana	9,861	9,340	9,080	19,234	18,420	-2.8%	-7.9%	-4.2%
Minas Centrais	10,168	9,265	10,032	20,407	19,297	8.3%	-1.3%	-5.4%
Southern System	19,496	17,667	20,743	36,275	38,409	17.4%	6.4%	5.9%
Minas Itabirito	7,691	7,345	7,993	14,868	15,338	8.8%	3.9%	3.2%
Vargem Grande	5,784	4,800	5,950	10,242	10,750	24.0%	2.9%	5.0%
Paraopeba	6,021	5,521	6,800	11,165	12,321	23.2%	12.9%	10.4%
Midwestern System	1,417	1,302	1,366	2,331	2,668	4.9%	-3.6%	14.5%
Corumbá	1,028	975	915	1,637	1,890	-6.2%	-11.0%	15.5%
Urucum	389	327	451	694	778	38.1%	16.0%	12.1%
Samarco(1)	2,798	2,556	2,775	5,300	5,331	8.6%	-0.8%	0.6%

⁽¹⁾ Vale s attributable production capacity of 50%.

Pellets

000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	% change 2Q12/1Q12	% change 2Q12/2Q11	% change 1H12/1H11
PELLETS	13,140	12,692	14,256	25,656	26,949	12.3%	8.5%	5.0%
Tubarão I and II	1,440	1,062	1,530	2,776	2,592	44.1%	6.3%	-6.6%
Fábrica	992	907	956	1,939	1,863	5.4%	-3.6%	-3.9%
São Luís	1,349	962	1,373	2,686	2,334	42.7%	1.7%	-13.1%
Vargem Grande	1,321	823	1,383	2,597	2,206	68.2%	4.7%	-15.0%
Oman	336	1,415	1,593	336	3,008	12.6%	374.8%	796.5%
Nibrasco	2,291	2,257	1,977	4,699	4,234	-12.4%	-13.7%	-9.9%
Kobrasco	1,001	1,139	1,258	2,224	2,397	10.5%	25.6%	7.8%
Hispanobras(1)	544	540	565	1,086	1,105	4.7%	4.0%	1.8%
Itabrasco	1,135	1,019	1,020	2,155	2,039	0.1%	-10.1%	-5.4%
Samarco(2)	2,731	2,570	2,599	5,159	5,169	1.2%	-4.8%	0.2%

⁽¹⁾ Vale s attributable production capacity of 50.89%.

⁽²⁾ Vale s attributable production capacity of 50%.

Manganese ore and ferroalloys

000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	% change 2Q12/1Q12	% change 2Q12/2Q11	% change 1H12/1H11
MANGANESE ORE	619	484	584	1,117	1,068	20.6%	-5.6%	-4.4%
Azul	486	379	463	902	843	22.2%	-4.6%	-6.6%
Urucum	82	67	81	134	148	22.1%	-0.7%	10.2%
Other mines	51	38	39	81	78	3.0%	-23.3%	-3.8%
FERROALLOYS	114	106	109	227	215	2.7%	-4.2%	-5.3%
Brazil	52	50	46	104	96	-6.7%	-11.6%	-7.8%
Dunkerque	37	30	35	74	64	17.1%	-4.9%	-12.4%
Mo I Rana	25	2.7	28	50	55	4.3%	12.2%	10.1%

Coal

000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	% change 2Q12/1Q12	% change 2Q12/2Q11	% change 1H12/1H11
METALLURGICAL								
COAL	518	1,127	1,277	1,007	2,403	13.3%	146.3%	138.8%
Moatize	0	501	728	0	1,229	45.2%	n.m.	n.m.
Carborough Downs	368	325	82	599	407	-74.8%	-77.8%	-32.1%
Integra Coal	30	124	266	216	390	115.0%	793.5%	80.9%
Others	121	177	201	192	378	13.6%	66.3%	96.6%
THERMAL COAL	787	1,223	1,190	1,720	2,414	-2.7%	51.3%	40.3%
Moatize	0	193	390	0	583	101.7%	n.m.	n.m.
El Hatillo	698	848	571	1,533	1,419	-32.7%	-18.2%	-7.5%
Integra Coal	25	81	121	96	202	50.5%	381.9%	110.9%
Others	63	102	108	91	210	6.5%	70.9%	130.8%

BASE METALS

Nickel

000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	% change 2Q12/1Q12	% change 2Q12/2Q11	% change 1H12/1H11
NICKEL	56	63	61	115	124	-3.6%	8.4%	7.9%
Sudbury	10	23	17	25	40	-22.6%	69.1%	62.5%
Thompson	7	6	7	15	13	12.6%	1.0%	-14.0%
Voisey s Bay	15	14	15	32	29	1.9%	-5.2%	-7.7%
Sorowako	19	12	17	37	29	36.3%	-11.6%	-20.6%
VNC	2	2	2	2	4	-17.5%	-5.9%	73.7%
Onça Puma	1	4	2	1	6	-56.3%	62.0%	316.7%
Others(1)	2	2	2	4	3	-1.3%	-2.0%	-9.3%

⁽¹⁾ External feed purchased from third parties and processed into finished nickel in our operations

Copper

						% change	% change	% change
000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	2Q12/1Q12	2Q12/2Q11	1H12/1H11
COPPER	63	73	70	133	143	-4.4%	11.0%	7.4%
Sossego	23	25	28	46	53	11.5%	22.7%	16.8%
Sudbury	22	24	22	47	46	-7.2%	0.4%	-3.4%

Thompson	0	1	1	1	2	-28.4%	242.0%	166.8%
Voisey s Bay	11	11	8	25	19	-31.6%	-31.6%	-21.8%
Tres Valles	2	4	3	3	7	-2.5%	58.3%	126.1%
Others	4	8	8	11	15	-4.9%	80.2%	36.5%

Nickel by-products

	2011	1012	2012	17711	17712	% change	% change	% change
	2Q11	1Q12	2Q12	1H11	1H12	2Q12/1Q12	2Q12/2Q11	1H12/1H11
COBALT (metric tons)	640	592	693	1,221	1,285	17.0%	8.2%	5.3%
Sudbury	57	206	166	98	372	-19.2%	190.8%	279.2%
Thompson	41	22	22	92	44	0.7%	-46.1%	-52.2%
Voisey Bay	410	310	316	838	626	1.9%	-22.9%	-25.3%
VNC	114	40	177	136	217	343.0%	55.7%	59.4%
Others	18	14	11	56	25	-21.4%	-39.0%	-55.5%
PLATINUM (000 oz								
troy)	51	38	39	108	77	2.8%	-22.7%	-28.4%
Sudbury	51	38	39	108	77	2.8%	-22.7%	-28.4%
PALLADIUM (000 oz								
troy)	72	59	66	144	125	11.9%	-8.0%	-13.3%
Sudbury	72	59	66	144	125	11.9%	-8.0%	-13.3%
GOLD (000 oz troy)	95	19	18	125	37	-5.8%	-81.2%	-70.5%
Sudbury	95	19	18	125	37	-5.8%	-81.2%	-70.5%
SILVER (000 oz troy)	686	595	567	1,281	1,162	-4.7%	-17.3%	-9.3%
Sudbury	686	595	567	1,281	1,162	-4.7%	-17.3%	-9.3%

FERTILIZER NUTRIENTS

Potash

						% change	% change	% change
000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	2Q12/1Q12	2Q12/2Q11	1H12/1H11
POTASH	145	118	129	279	247	8.9%	-11.2%	-11.6%
Taquari-Vassouras	145	118	129	279	247	8.9%	-11.2%	-11.6%

Phosphates

	2Q11	1Q12	2Q12	1H11	1H12	% Change 2Q12/1Q12	% Change 2Q12/2Q11	% Change 1H12/1H11
PHOSPHATE ROCK	1,858	1,826	2,017	3,601	3,843	10.4%	8.5%	6.7%
Brazil	1,272	1,112	1,237	2,420	2,349	11.2%	-2.8%	-2.9%
Bayóvar	586	714	779	1,180	1,493	9.2%	33.1%	26.5%
MAP(1)	131	311	286	341	597	-8.3%	118.3%	75.3%
TSP(2)	175	241	213	408	454	-11.5%	21.6%	11.1%
SSP(3)	666	484	507	1,212	991	4.7%	-23.9%	-18.2%
DCP(4)	158	144	136	315	280	-5.5%	-14.1%	-11.1%

⁽¹⁾ Monoammonium phosphate

- (2) Triple superphosphate
- (3) Single superphosphate
- (4) Dicalcium phosphate

Nitrogen

						% change	% change	% change
000 metric tons	2Q11	1Q12	2Q12	1H11	1H12	2Q12/1Q12	2Q12/2Q11	1H12/1H11
AMMONIA	167	132	101	325	233	-23.4%	-39.5%	-28.1%
UREA	175	107	143	335	250	32.8%	-18.5%	-25.2%
NITRIC ACID	121	118	120	228	238	1.5%	-0.6%	4.4%
AMMONIUM								
NITRATE	114	119	124	217	242	4.2%	8.5%	11.8%

For further information. please contact:

+55-21-3814-4540

Roberto Castello Branco: roberto.castello.branco@vale.com

Viktor Moszkowicz: viktor.moszkowicz@vale.com

Carla Albano Miller: carla.albano@vale.com

Andrea Gutman: andrea.gutman@vale.com

Christian Perlingiere: christian.perlingiere@vale.com

Marcio Loures Penna: marcio.penna@vale.com

Rafael Rondinelli: rafael.rondinelli@vale.com

Samantha Pons: samantha.pons@vale.com

This press release may include statements that present Vale s expectations about future events or results. All statements, when based upon expectations about the future and not on historical facts, involve various risks and uncertainties. Vale cannot guarantee that such statements will prove correct. These risks and uncertainties include factors related to the following: (a) the countries where we operate, especially Brazil and Canada; (b) the global economy; (c) the capital markets; (d) the mining and metals prices and their dependence on global industrial production, which is cyclical by nature; and (e) global competition in the markets in which Vale operates. To obtain further information on factors that may lead to results different from those forecast by Vale, please consult the reports Vale files with the U.S. Securities and Exchange Commission (SEC), the Brazilian Comissão de Valores Mobiliários (CVM), the French Autorité des Marchés Financiers (AMF), and The Stock Exchange of Hong Kong Limited, and in particular the factors discussed under Forward-Looking Statements and Risk Factors in Vale s annual report on Form 20-F.

Table of Contents

Date: July 18, 2012

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Vale S.A. (Registrant)

By:

/s/ Roberto Castello Branco Roberto Castello Branco Director of Investor Relations