

Name of the project : Jaypee Himachal Cement Grinding & Blending Unit,
Clearance Letter No. : J-11011/123/2009-IA II(I) dated 27th Feb, 2010
Period of Compliance Report : April 2015 – September, 2015.

A. SPECIFIC CONDITIONS:

Sl. No.	Conditions	Compliance Status
i).	Capacity of the captive power requirement and D.G sets for the proposed plant shall not exceed 10 MW and 1x10.89 MW.	There is no Captive power Plant for the Grinding & Blending Unit DG set capacity is maintained as specified in EC.
ii).	Other necessary statutory clearances from the concerned Departments including 'No Objection Certificate' from the H.P. State Environment Protection & Pollution Control Board (HPSEP & PCB) shall be obtained prior to commencement of construction and / or operation.	'No Objection Certificate' have been obtained from HPSPCB vide letter no. PCB (399) Jaiprakash Asso. H. Cements/ 2003-13643-48 dated 02.11.2004. Consent to operate obtained from HPSPCB vide letter no PCB (399)-16331-36 dated 19.11.20009. It has been renewed periodically and now valid up to 31.03.2016.
iii).	Continuous on-line stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided. After expansion, limit of SPM shall be controlled within 50 mg/Nm ³ by installing adequate air pollution control system viz. Electrostatic precipitators, bag house, bag filters and stacks of adequate height etc. interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically. Data on ambient air, fugitive and stack emissions shall be submitted to the Ministry's Regional office at Chandigarh, H.P. State Environment Protection & Pollution Control Board (HPSEP & PCB) and CPCB regularly.	We have already installed Opacity Meter for online monitoring for particulate Matter (PM) emission in the stack; SPM is maintained within 50 mg/NM ³ by installing 48 no of bag filters, bag house and 2 no of stacks of adequate height as per CPCB norms i.e. 75 mtre & 79 mtre. Observed SPM values ranges: 15.07 – 27.22 mg/Nm ³ We have also installed On-line Continuous ambient air quality monitoring station (CAAQMS) and the data on real time basis is being transferred to servers of CPCB, HPSPCB & Company's website. Data on ambient air and stack emission are submitted to the MoEF, Regional Office at Chandigarh, HP State Pollution Control Board & CPCB regularly.

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		Interlocking facility has been provided.
iv)	An action plan shall be prepared and submitted to the Ministry's Regional Office at Chandigarh for the control of SO ₂ emission from the captive power plant.	Not applicable. Since captive power plant is not installed.
v)	Ambient air quality monitoring (AAQM) stations shall be set up as per statutory requirement in consultation with the H.P. State Environment Protection & Pollution Control Board (HPSEP & PCB). Ambient air quality including ambient noise level shall not exceed the standards stipulated under EPA or by the State Authorities. Monitoring of ambient air quality shall be carried out regularly in consultation with HPSEP & PCB and data submitted to the CPCB and HPSEP & PCB regularly. The instruments used for ambient air quality monitoring shall be calibrated time to time.	<p>Ambient air quality monitoring (AAQM) stations have been set up and Air Quality Monitoring and Noise level monitoring is carried out as per statutory requirement. Monitoring data of ambient air and noise level are within the limit, and are submitted to CPCB, HPSPCB, and MoEF regularly. The instruments used for ambient air quality monitoring are being calibrated from time to time.</p> <p>Ambient air quality parameters observed values ranges:</p> <p>PM₁₀ : 41.55 – 91.84 µg/m³ PM_{2.5} : 12.77 – 30.56 µg/m³ SO₂ : 2.06 – 7.87 µg/m³ NO_x : 6.05 – 23.24 µg/m³ Pb : 0.003 – 0.040 µg/m³ As : 0.002 – 0.800 ng/m³ Ni : Not Detectable</p> <p>Observed Noise level values ranges: In & around the plant premises: Day time: 68.4 – 72.4 dBA Night Time: 64.6 – 68.5 dBA</p> <p>Ambient Noise Level: Day Time : 48.2 – 53.6 dBA Night Time : 40.2 – 44.2 dBA</p>
vi)	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 th November, 2009 shall be followed.	The National Ambient Air Quality Emission standards are being followed.
vii)	Gaseous emission levels including secondary fugitive emissions from all the	Gaseous emission levels including secondary fugitive emissions are

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	sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of practice issued by the CPCB Shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414 (E) dated 30 th May, 2008 shall be followed.	controlled as per Guidelines/Code of practice issued by CPCB/HPSPCB.
viii)	The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking) vehicular movement, bagging and packing areas etc. All the raw material stock piles shall be covered. A closed clinker stockpile system shall be provided. All conveyers shall be covered with GI sheets. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided besides coal, cement fly ash and clinker shall be stored in silos. Pneumatic system shall be used for fly ash handling. Water sprinkling arrangement shall be made in the raw material stock yard and cement bag loading areas.	<ul style="list-style-type: none"> • Air pollution control equipments (Bag House & Bag Filters) have already been installed to control stack and fugitive emissions. • Wet fly ash and gypsum are stored in covered shed. • Clinker, dry fly ash and Cement are stored in silos. • All conveyors are covered with GI sheets. • The collected dust from APCD's is recycled back in the process. • Water tankers have been deployed for water sprinkling at raw material gantry area, road and other dust generating area for dust suppression. Fixed type water sprinklers have also been provided at in front of CCR building and near gypsum storage yard along the plant boundary.
ix)	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emission shall be regularly monitored.	All the raw materials including fly ash are being transported in closed containers only. It is ensured that the trucks/dumpers carrying raw materials and finished products are not overloaded. Vehicular emission is regularly monitored so as to reduce the impact of truck movement for transport of raw materials & end products on the surrounding environment.

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<p>x)</p>	<p>Asphalting/concreting of roads and water spray all around the stockyard and loading/unloading areas in the cement plant shall be carried out to control fugitive emissions. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading points, transfer points and other vulnerable areas. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.</p>	<p>All roads in the plants have been concretized. Water sprinkling is carried out in a structured scheduled manner in critical areas having dust emissions. Ambient air quality Measurement is done regularly and the results are well within the limits prescribed by the Central Pollution Control Board. Observed ambient air quality parameters values ranges are mentioned in condition No. V.</p>
<p>xi)</p>	<p>Total water requirement for cement plant from bore wells shall not exceed 748 m³/day as per 'permission' accorded by the Central Ground Water Authority/ State Ground Water Board (CGWA/SGWB) and efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated waste water shall be recycled and reused in the process and/ or for dust suppression and green belt development and other plant related activities etc. No process waste water shall be discharged outside the factory premises and zero discharge shall be adopted.</p>	<ul style="list-style-type: none"> • Ground water requirement is well within the permissible limit of 748 M³/day. The plant is designed on Zero effluent discharge. There is no process waste water discharge from the process and zero discharge is being maintained. • The domestic waste water of the town ship is treated in sewage treatment plant. The treated water is being utilized in green belt development and dust suppression and the sludge is used as manure. • The area is not notified under the Central Ground Water Authority. However the ground water consumption is well within the prescribed limit as mentioned above. Ground water parameters observed values ranges: pH : 7.20 – 7.60 Total Hardness as CaCo₃: 234.0 – 260.0 mg/l Chloride : 16.0 – 42.0 mg/l

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		Dissolved Solid: 286.0 – 340.0 mg/l
xii)	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	Rain water harvesting measures have been undertaken. Total 4 no's of Rain Water Harvesting Tank have been installed with total capacity is 1032 m3.
xiii)	All the bag filter dust, raw meal dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers/ preprocessors only. Sludge generated from sewage treatment plant (STP) shall be used as manure.	All the bag filter dust, clinker dust and cement dust are recycled and reused in the process. Used oil and batteries are sold to authorized recycler. STP sludge is used as manure for horticulture/ green belt development and treated water is used for sprinkling for dust suppression and horticulture purpose.
xiv)	All the fly ash shall be utilized as per Fly Ash Notification 1999 subsequently amended in 2003. Efforts shall be made to use fly ash maximum in making Pozzolana Portland Cement (PPC).	Fly ash procured from National Fertilizer Ltd, Nangal, Guru Hargabind Singh Super Thermal Power Plant, Lehra Mohabat and Nabha Power Plant, Rajpura, Punjab is utilized as per Fly Ash notification.
xv)	Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.	This is only a cement grinding unit and Fly ash is used for Pozzolana Portland Cement Manufacturing as per the BIS standards. Use of low grade lime and other solid waste is not applicable.
xvi)	As proposed, green belt shall be developed in at least 8 ha. (33%) area in and around the cement plant as per the CPCB guideline to mitigate the effects of air emissions in consultation with local DFO.	The green belt development is a continuous process. Total 12,134 numbers of trees, creepers, shrubs, hedges have been planted and survived to covered 33.87% of the total area.
xvii)	A Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Chandigarh, HPPCB and CPCB within 3 months of issue	Risk and Disaster Management plan has already been prepared and it is being updated from time to time.

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	of environment clearance letter.	
xviii)	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.	All the applicable recommendations made in the CREP have been implemented.
xix)	All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 7 th September, 2009 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Chandigarh.	All the points raised during public hearing have already been complied and information submitted. Separate budget for implementation was allocated and the information submitted to RO, MoEF
xx)	At least 5% of the total cost of the project shall be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Chandigarh. Implementation of such program shall be ensured accordingly in a time bound manner.	The Corporate Social Responsibilities programs are in process.
xxi)	The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Not applicable, as the construction phase is over and the plant is in operation.

A. GENERAL CONDITIONS:

Sl. No.	Conditions	Compliance Status
i)	The project authority must adhere to the stipulations made by H.P state Environment Protection & Pollution control Board (HPSEP & PCB) and State Government.	All the stipulations made by HP State Environment Protection & Pollution Control Board and State Govt. are adhered to.
ii)	No further expansion or modification of	Noted and Agreed.

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	the plant shall be carried out without prior approval of this Ministry.	
iii)	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	<p>There is no industrial effluent discharge from the process. The domestic waste water of the township is treated in sewage treatment plant and the treated water conform to the prescribed standard. The treated waste water is being utilized in green belt development and dust suppression and the sludge is being used as manure.</p> <p>The range of quality parameters of STP treated water is given below: -</p> <p>PH : 7.2 – 7.7 BOD : 12.80 – 20.00 mg/l COD : 32.00 – 52.40 mg/l TSS : 28.00 – 48.00 mg/l Chloride : 38.00 – 60.00 mg/l Oil & Grease: Negligible</p>
iv)	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 d BA (day time) and 70 dBA (night time). Compliance to all the standards for DG sets for noise shall be ensured and acoustic enclosures around DG sets shall be provided.	<p>The Ambient noise level is maintained as per Standard prescribed by HPSPCB/CPCB / MoEF.</p> <p>Observed noise level in and around the plant area and ambient noise level ranges are mentioned in Specific condition No. V.</p>
v)	Proper housekeeping and adequate occupational health programs must be taken up. All the persons working in the sensitive areas shall wear protective covers. Occupational Health Surveillance programme shall be done on a regular basis and records maintained. The program must include lung function	<ul style="list-style-type: none"> • All the persons working in the sensitive area have been provided with protective gadgets. • Proper house-keeping is maintained within the premises. Mechanical Sweeping machine is

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	<p>sputum analysis tests once in six months.</p>	<p>working in plant area. Daily manual sweeping is also carried out. Dust bins have been provided at various locations.</p> <ul style="list-style-type: none"> • For Occupational health checkup of the workers, a qualified doctor along with the medical staff has been appointed. Periodic Medical Examination of workers is being done on a regular basis and the record is maintained. <ul style="list-style-type: none"> ▪ <u>Medical examination</u> : <p>The-occupational health status of workers and staff was found to be satisfactory, the details are as follows -</p> <ol style="list-style-type: none"> 1. majority of examined personnel were in good general health with normal parameters, deviations recorded were as follows <ul style="list-style-type: none"> - Refractive errors 07.76% - Overweight 01.94% - Abnormal vision 0.97% 2. <u>Spirometry</u>: Lung functions of majority were within normal limits, without any obstructive or restrictive changes, however in 06.79% of the examined persons functional restriction was observed because of seasonal conditions. 3. <u>X ray chest(PA)</u>: All the examined persons had normal chest radiographs, no changes in lung parenchyma were seen in lung fields and associated lung structures.
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		<p>4. Audiometry: Majority had normal hearing acuity, however in 01.94% of examined persons mild conductive hearing loss was seen because of seasonal upper respiratory and associated middle ear conditions.</p> <p>5. Routine blood and urine tests were within normal limits</p> <p>6. Sputum for AFB was negative in all the specimens.</p> <p>7. All the persons with abnormal tests were treated on site and necessary specialist advice given for secondary level treatment wherever required.</p>
vi)	The company shall under take eco-development measures including community welfare measures in the project area.	Community welfare measures and eco-development programme are under taken under CSR activities.
vii)	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the Rapid and Comprehensive EIA/EMP.	All the environmental protection measures and safeguards recommended in the EIA/EMP are being complied.
viii)	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of senior Executive.	Environmental Management Cell with full fledged laboratory facilities has already been set up to carry out various environment management activities and monitoring functions under the control of senior executive.
ix)	As proposed, Rs. 25 Crore earmarked towards capital cost and recurring cost/annum for environmental pollution control measures shall be used exclusively to implement the conditions stipulated by the Ministry of Environment & Forests as well as State Government. A time bound action plan along with the implementation	<p>Funds have been earmarked for Environmental pollution control. The fund is being used for environmental protection measures only and is not diverted for any other purpose.</p> <p>Total recurring cost incurred on various pollution control measures for the</p>

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	<p>schedule for all the conditions stipulated herein shall be submitted to the Ministry, HPSEP & PCB and CPB and CPCB. The funds so provided shall not be diverted for any other purposes.</p>	<p>period of April – September 2015, are given below:</p> <table border="1" data-bbox="879 472 1396 1016"> <thead> <tr> <th>Sr. no</th> <th>Description</th> <th>Cost (Rs Lacs)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Expenses on Laboratory analysis & testing</td> <td>2.12</td> </tr> <tr> <td>2</td> <td>Maintenance cost of APCD</td> <td>3.64</td> </tr> <tr> <td>3</td> <td>Operation & Maintenance of STP</td> <td>2.00</td> </tr> <tr> <td>4</td> <td>Green Belt Development</td> <td>8.78</td> </tr> <tr> <td>5</td> <td>Occupational Health</td> <td>9.28</td> </tr> <tr> <td>6</td> <td>Road repairing</td> <td>26.38</td> </tr> <tr> <td></td> <td>Total</td> <td>52.20</td> </tr> </tbody> </table>	Sr. no	Description	Cost (Rs Lacs)	1	Expenses on Laboratory analysis & testing	2.12	2	Maintenance cost of APCD	3.64	3	Operation & Maintenance of STP	2.00	4	Green Belt Development	8.78	5	Occupational Health	9.28	6	Road repairing	26.38		Total	52.20
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<p>x)</p>	<p>A copy of clearance letter shall be sent by the proponent to concerned panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the local NGO. If any, from whom suggestion/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.</p>	<p>A copy of clearance letter has already been sent to concerned panchayat, local body and local NGO.</p> <p>The clearance letter has also been uploaded on the web site of the company.</p>																								
<p>xi)</p>	<p>The project proponent shall upload the status of compliance of the stipulated environment conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, the respective zonal office of CPCB and the HPSEP & PCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a</p>	<p>Status of compliance of the stipulated environmental conditions, including results of monitored data is uploaded in the company's website and sent to the Regional Office of the MoEF, the respective zonal office of CPCB and the HPSPCB periodically. The criteria pollutant levels are being monitored and displayed near the main gate of the company in the public domain.</p>																								

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	convenient location near the main gate of the company in the public domain.	
xii)	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copy as well as by e-mail) to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry/ CPCB/HPSEP & PCB shall monitor the stipulated conditions.	It is being complied on regular basis. The Last Six Monthly Compliance Report have submitted to the Regional Office of MoEF, the respective Zonal Office of CPCB and SPCB vide letter of even no. dated 02/06/2015.
xiii)	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by project proponent to the concerned State Pollution Control Board under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MoEF by e-mail.	It is being complied on regular basis. The Last Environmental Statement (FY 2014-2015) have submitted vide letter No JAL: JHCGBU: ENV:2015 dated 29/09/2015.
xiv)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the HPSEP & PCB and may also be sent at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local news papers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Chandigarh.	It has already been complied.
xv)	Project authorities shall inform the Regional office as well as the Ministry, the date of financial closure and final approval of the project by the concerned	Already complied.

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	authorities and the date of commencing the land development work.	
xvi)	The Regional office of this Ministry at Chandigarh/Central Pollution Control Board/ HPSEP & PCB shall monitor the stipulated conditions. A Six Monthly Compliance Report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Six monthly compliance reports of EC and the monitored data along with statistical interpretation are submitted periodically to the concerned authorities. Last Six monthly compliance reports of EC and the monitored data along with statistical interpretation have already submitted vide letter No JHCGBU: ENV: 2015/2334 dated 02/06/2015.

C. ADDITIONAL CONDITIONS OF MoEF, NEW DELHI'S LETTER NO.J-11011/123/2009-IAII (I) DATED 12TH NOVEMBER, 2012.

11. (I)	All the commitments made vide letter dated 17.10.2012 w.r.t. utilization of partially constructed structures and open areas especially for rain water harvesting, green belt with medicinal plants and fruit bearing trees besides other activities shall be complied. The compliance/progress in this regard shall be submitted along with the six monthly compliance report to Ministry's Regional Office at Chandigarh.	Total Land area for CGU+CPP is 24.5 ha, out of which land area for CPP is 3.8 ha. The details of total built up area (0.7008 ha) of partially constructed CPP structures are given as below:	
		Partially Constructed CPP Structures	Re-appropriated to use as given this letter.
		TG Building	Administrative Usages
		Ground Floor (0.1914 ha)	Converted to Auto Work shop.
		First Floor (0.1914 ha)	Being converted to Store & Record room.
		Second Floor (0.1914 ha)	Shall be converted to Living accommodation.
		ESP Building	
		Single storied (0.0167 ha)	Converted to Training Centre with temporary roofing.
		Stack structure (0.0049 ha)	Converted to Overhead water storage Tank. Water tank has been placed over the structures for supplying water for the purpose of green belt development within open area around the work shop.
		Air Cooled condenser	Converted to Store &

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		structure (0.105 ha)	Fire Station with temporary roofing.
		Total Covered Surface area 0.318 ha.	
		Besides above, open area around partially constructed CPP Structures is being utilized in the following manners:	
		Open area near partially Constructed CPP Structures	Being used for.
		Open area near T G Building converted Auto work shop. (0.180 ha)	Rain water Harvesting Reservoir/ Tank + Pump house.
		Open area near air Cooled Condenser converted Store + Fire station. (0.455 ha)	Green belt with fruit bearing plants. Fruit bearing trees (Mango, Pomegranate, Guava, Jack fruit and peach) have been planted.
		Open area near material gate/ 4 m wide road. (0.648 ha)	Green belt with medicinal plants. Medicinal plants (Arjun, Neem, Amla and Harad) have been planted.
		Open area between 10 m wide road and 8 m wide road. (1.0 ha)	Vehicles Parking.
		Other open area (1.2)	Being converted into green belt.
		Total open surface area 3.482 ha.	
		Total Land Surface area = 0.318 + 3.482 = 3.80 ha.	