

**The m of Public Hearing in respect of M/s Sant Muktai Sugar & Energy  
Ltd. fo proposed Distillery Unit of 30 KLPD at Gut No. 340, 348, 349 &  
350, t Ghodasgaon, Tal. Muktai Nagar, Dist. Jalgaon conducted on  
13/12/2017, 11.00 am at Project Site**

The F ental Public Hearing in respect of M/s Sant Muktai Sugar & Energy Ltd. for their pro, -- -- distillery Unit of 30 KLPD at Gut No. 340, 348, 349 & 350, At Post Ghodasgaon, Tal. Muktai Nagar, Dist. Jalgaon was conducted on 13/12/2017, 11.00 am at Project Site. The public hearing was conducted under the Chairmanship of **Shri Goraksh Gadilkar**, Additional District Magistrate, Jalgaon.

**Shri A. M. Kare**, Sub-Regional Officer, MPCB Jalgaon was the Convener of the Public Hearing. **Shri R. U. Patil**, Regional Officer, M.P.C. Board, Nashik was the Member of Public Hearing Panel. Mrs R. M. Pawar, Tahsildar, Muktai Nagar was also present during the public hearing. The Public Hearing started on 11.00 am with the permission of the Chairman of the Public Hearing Panel.

**PURPOSE & PROCEDURE:**

Convener of the public hearing panel welcomed all people present for the Public Hearing. He told that the Public Hearing is being conducted as per the provisions of EIA Notification dated 14/09/2006 and amended Notification dated 01/12/2009 of Ministry of Environment, Forest & Climate Change, New Delhi. He told that the project proponent received TOR (Terms of Reference) for this project from Ministry of Environment, Forest & Climate Change, New Delhi on 26/10/2016. Project Proponent submitted their application to the Head Office of MPC Board on 11/7/2017 requesting for conducting the public hearing. The public notice for the said public hearing was published on 10/11/2017 in Marathi Daily 'Lokmat' and on 11/11/2017 in English Daily 'The Times of India' stating date, venue and time of public hearing.

The copies of draft EIA/EMP and Executive Summaries in English and Marathi submitted by project proponent and copy of public notices published in newspapers were made available vide letter no. MPC/SROJ/717/2017 dated 13/11/2017 to the following offices for the knowledge of concerned.

- 1) District Collector, Jalgaon
- 2) District Industries Centre, Jalgaon
- 3) Zilha Parishad, Jalgaon
- 4) Tahsil Office, Muktai Nagar, Dist. Jalgaon
- 5) Ghodasgaon Gram-panchayat, Tal. Muktai Nagar, Dist. Jalgaon
- 6) Regional Office, M. P. C. Board, Nashik
- 7) Sub-Regional Office, M. P. C. Board, Jalgaon,
- 8) M. P. C. Board (HQ), Mumbai,
- 9) Environment Department, Mantralaya, Mumbai,

In the public notice, it was mentioned that the documents about proposed project are available at the above Government offices and objections / suggestions regarding the project, if any can be filed within 30 days from the date of public notice to the Sub-Regional Officer, MPCB, Jalgaon. The Member Secretary, M. P. C. Board, Mumbai has issued the office order no. E-104 of 2017, dated 08/12/2017 for panel formation of this Public Hearing.

Convenor of the Public Hearing further informed to the participants that, **no written representation was received regarding public hearing** till the date of public hearing. He further appealed to the participants that, they can file their written objections / representations during Public Hearing and they could express their views orally after the power point presentation that will be given by the project proponent. He further clarified to the participants that the Public Hearing panel is not here to accord / recommend Environmental Clearance to the project, but for recording the objections/suggestions of the participants, which will be video graphed and will be submitted to the Ministry of Environment, Forest & Climate Change, New Delhi through Head Office, of M. P. C. Board along with minutes of public hearing for further necessary action. **During public hearing no written representations were submitted by the people.**

The Convenor, with the permission of Chairman, then requested the project proponent to give information about their project through power point presentation in local language.

**Dr Prashant Banne** of M/s JV Analytical Services, Pune on behalf of Project Proponent gave the information about the project in local language (Marathi) through presentation on the proposed distillery project of M/s Sant Muktai Sugar & Energy Ltd.

#### **PRESENTATION OF PROJECT PROPONENT:**

M/s Sant Muktai Sugar & Energy Ltd. is an agro based Company focused on the manufacture of sugar, power and allied products. The company has established and running a 2500 TCD sugar at Gat no. 340, 348, 349, 350 of Village Ghodasgaon, Tal- Muktainagar, Dist- Jalgaon, Maharashtra, This Industry wishes to establish a new molasses based alcohol distillery of 30 KLPD capacity. The sugar unit generates large quantities by-products viz. bagasse, molasses and press mud. To be economically and environmentally sustainable it is necessary for the sugar industries to convert these by-products into high value products, and hence this is done.

M/s Sant Muktai Sugar & Energy Ltd. to establish a new molasses based alcohol distillery of 30 KLPD capacity. Further, the Notification no. S. O. 1533 promulgated on 14th September 2006 has categorized, 30 KLPD distillery based on molasses under Category-A; Schedule 5 (g). Accordingly, the project proponents had submitted prescribed application along with pre-feasibility report to the MoEF & CC New Delhi. MoEF, New Delhi has considered the project for ToR in the 14th EAC meeting dated 26th October, 2016. ToR approved by EAC and suggest the specified TOR and Scoping for conduct of EIA studies and preparation of Draft EIA Report. Accordingly the EIA studies were conducted and the draft EIA report is prepared for submission to authorities.

As per the TOR the industry has to prepare and environmental impact assessment (EIA) due to proposed activity. The draft EIA has been prepared and this summary is the executive summary of the same.

## PROJECT DETAILS

SMSEL is an existing industry. SMSEL owns a plot in village Ghodasgaon. The details of expansion proposal are as under:

#	Product	Production			Unit
		Existing	Additional	Total	
1	Sugarcane	2500	-	2500	TCD
2	Co-gen Power	-	-	-	MW
3	Ethyl Alcohol	-	30	30	KLPD

## LAND UTILIZATION

PP has in possession 15.16 Ha land. Present factory is spread over in about 1.14 Ha. Expansion proposal will need another 3000 m<sup>2</sup> of land. 5510 m<sup>2</sup> of land has been reserved for green belt development. Balance land has been used for –

### Land utilization

Sr. No	Land Utilization For	Land Area (Sq. m)
1	Factory sheds & Buildings	11351.98
2	Open space utilize for Bagasse storage,	3724 m <sup>2</sup>
	WTP, ETP,	2275 m <sup>2</sup>
	Molasses storage tank	189 m <sup>2</sup>
	spray pond,	5016 m <sup>2</sup>
	switch yard & 15days storage for ETP treated water (guard pond).	3880 m <sup>2</sup>
3	Internal Roads	65241.00
4	Reservoir (water storage tank)	176.00
5	Parking and cane yard	50959.00
6	Open space for green belt	5510.00
7	Reserved for future expansion	324.00
8	Distillery Area	3000.00
	<b>Total</b>	<b>151645.98</b>

## LOCATION

The distillery site is located at Village – Ghodasgaon, Tal- Muktainagar, Dist- Jalgaon, Maharashtra. The site is located at rural surroundings and is about 18 km from Railway Station (Bodwad) and 65 km from Jalgaon (district place), 3 km from river Purna. It is geographically located in 21°01'35.28"N latitudes and 76°06'33.29"E longitude. The site is near Jalgaon-Nagpur road but little away laterally.

The area surrounding the proposed plant site is flat and is at the elevation about 397 meters above the sea level. The surface soil in the area is mainly red brown and light brown soil.

### Rivers and Water Bodies:

Purna River flows approx 3.0 km away from the site. Nearest city is Muktainagar. Nearest highway is NH 6 - Nagpur Jalgaon. Nearest airport is Jalgaon 65 Km. Ghodsgaon is well connected to all the important places by Road. Maharashtra is the Sugar Cane growing area and thus the raw material availability is assured. Being industrially backward area, it attracts government incentives which can help to improve the economics of the project.

There is no wildlife sanctuary/reserve forest or archeological monument within 10 km radius from the site

### **COST OF PROJECT**

Total Cost for distillery project will be Rs. 3816 Lakhs. Cost of entire project (Existing + additional is) Rs 5270 Lakhs,

### **RAW MATERIAL**

The capacity of the proposed Molasses based distillery shall be 30 KLPD. For this the main and sole raw material is molasses. The yeast brings about the change. Some chemicals in small quantity are used for supporting propagation of the yeast and help to fermentation. Thus, the following raw materials will be used.

<b>Item</b>	<b>Proposed capacity</b>	<b>Particulars</b>
Molasses MT/M	3600	Self and available in District
Turky Red Oil (anti-foam) MT/M	1.8	Available from Solapur, Aurangabad and Pune
Nutrients MT/M	0.12	

The requirement of molasses is 128 T/d i.e. for 270 days 34,468 T/annum at optimum level of operation. Molasses will be obtained from captive source from our own sugar unit and B heavy molasses is 20,426 T/Annum, which makes a deficit of 14,043 MT/year. To balance the requirement molasses, will be fulfill from sister concern unit of SMSEL and other nearby sugar mills will be utilized by SMSEL. Precautions will be taken for transportation and unloading of molasses.

In addition to the raw material, utilities are also required. These are:

- Power and Steam: Need connected 750 KW. Available through Govt. Electricity Board and own generation.
- Fuel: slop + Bagasse, Indian / imported Coal.
- Man Power: Taking existing manpower into consideration, for distillery, what we shall totally need is 54 (35 skilled, 14 semi-skilled and 5 unskilled for production and pollution control) persons. More than 85 % of the manpower requirement will be fulfilled by employing the local people. Man power requirement for construction work will be about 200. Construction workers will reside in nearby villages. Residential facility will not be required for the construction personnel.
- Water: Water need annually for proposed plant is 300 m<sup>3</sup>/d and for most part recycling is done. Fresh water need is met from surface flow with Irrigation Department Permission available and by recycling the waste water.
- Air: Multicyclone Dust collector is provided for control of emissions like SO<sub>2</sub>, PM, CO<sub>2</sub> etc in existing Boilers and ESP is proposed for new boiler.
- Steam requirement of unit can be met by using the proposed boiler 12 TPH.
- Compressed air is required for instrumentation and servicing. Thus, a compressed air is provided.
- Building materials: It will not be a heavy construction, and majority is in fabrication from Mild steel structural. The orientation is so kept as to balance nearly the cutting and filling. The small requirement is available systematically. The construction - erection time will be small and will be done in day time. Labour camp is not

necessary.

- Plant facilities will be provided like: 30 KLPD alcohol plant with fermentation and distillation units, Water treatment plant, New boiler of 12 TPH, T.G set of suitable capacity, Evaporator for spent wash, Bulk storage facilities for molasses and alcohol, WTP, ETP, cooling tower, fuel storage yard etc.
- Storage: Alcohol and molasses storage facilities shall be provided as per the rules of (1) Excise Department, (2) Factory Inspectorate and (3) MoEF/ SPCB. Storage of Bagasse and press mud is provided with existing sugar industry.

### STEAM AND POWER REQUIREMENT

Steam economy is achieved by employing multi-pressure distillation and multi effect evaporation units and adopting heat recovery systems in the plant. The new boiler of 12 TPH shall be provided for distillery plant. The details of boiler are given below.

#### BOILER DETAILS

Boiler No.	1		
Boiler Capacity MT/hr	12		
Steam Pressure kg/cm <sup>2</sup> (g)	45		
Steam temp deg. C	400±		
Efficiency	67% on 60% spent wash + 40 % coal or 61% on 60% spent wash + 40 % Bagasse		
Fuel used	slop	Bagasse	Indian / Imported coal
GCV (Kcal / kg)	1700	2272	3800 / 5200
Total ash generated %	14.28	1.5	39.81 / 7.00
Ash collected by ESP/Bag filter	99%	99%	
Fuel Quantity (TPH)	1.2	5.47	
Height of stack, m	48		

### EMISSIONS AND DISCHARGES DUE TO PROPOSAL

**Emissions in air:** When new boiler of 12 TPH will be run to operate. Fly ash discharged in the air will be in the prescribed limit of CPCB as ESP is proposed for control of dust.

**Water pollution:** The industry will utilize latest technology of treatment of spent wash by recovering biogas and then concentrating followed by burning of spent wash in boiler, thus adopting zero effluent discharge system.

**Noise pollution:** Operation of a distillery does not involve any heavy duty impact type of machinery operation hence does not contribute to noise pollution.

**Solid Waste Management:** When new boiler of 12 TPH will be run to operate. An estimated bottom fly ash will be sold to brick manufacturer

**Biodiversity:** The proposed activity is to be done at existing site itself. Further industry has opted for zero discharge system of spent wash treatment hence no effect is expected on existing biodiversity of region.

### BASELINE STUDIES

The actual on site monitoring of existing environmental setting was done to establish the baseline conditions with respect to climate, hydrological aspects, atmospheric conditions, water quality, soil quality, vegetation pattern, ecology, socio-economic profile. The study covered an area within 10 km radius from the Plant site. The studies for the project was carried out in the study area in summer month pre monsoon in 2017 Data on baseline condition of water environment of the study area was collected and observations are as under:

Parameters	Actual average values	Ambient Air quality
Pm10	62	100
Pm 2.5	34	60
SO <sub>2</sub>	27	80
NOx	21	80

It may be seen observed values of monitored parameters are within prescribed standards.(Monitoring location: Project site, Sukli, Ghodsgaon, Dudhalgaon,Nimkhede Kh,Chikhali,Muktainagar and Bhandugre etc.)

**Ground Water:** pH in ground water sample was observed at (Nimkhede Kh,Chikhali Sukli, Ghodsgaon and Bhandugre) to be in the range 7.2 to 7.7 while conductivity was observed in the range of 277 to 788  $\mu$ S/cm . The value of alkalinity and hardness were observed in the range of 80-256 mg/l and 101-313 mg/l respectively. Whereas heavy metal was found to be within the limit.

**Surface Water:** Water sample were collected from lakes and rivers. Samples were collected and analyzed as per standard methods and frequency of sampling was thrice /station. pH observed to be in the range of 6.9 to 7.3 and Chloride and Sulphate were observed to be in the range of 28 to 67 mg/l and from 18 to 19mg/l respectively. The heavy metal contents are found well within the limit.

**Noise Environment:** Noise level measurement was carried out at each ambient air quality station and also within the existing plant premises. The frequency of ambient noise level monitoring and noise level at source were twice/week/station and thrice/station respectively. Ambient noise levels were recorded in following time schedule:

Day time - 6 am to 7 am, 9 am to 10 am, 1 pm to 2 pm, 5 pm to 6 pm, 9 pm to 10 pm  
Night time - at 10 pm to 6 am.

## PREDICTION AND MITIGATION OF IMPACTS

**Emissions in air:** When new boiler of 12 TPH will be run to operate, PP proposes to install ESP type of dust collector and achieve the prescribed limit of fly ash discharge.

**Water pollution:** The industry will utilize latest technology of treatment of spent wash by recovering biogas and then concentrating followed by burning of spent wash in boiler, thus adopting zero effluent discharge system.

**Noise pollution:** Operation of a distillery does not involve any heavy duty impact type of machinery operation hence does not contribute to noise pollution.

Operators in boiler and turbine sections will be required to use personal protective equipment when operating the system.

**Solid waste disposal:** When new boiler of 12 TPH will be run to operate, generated ash due to boiler operation will be used by brick manufacturers. Concentrated dried spent wash will be burnt in the boiler.

## ENVIRONMENT MANAGEMENT PLAN (EMP)

SMSEL has drawn an Environment Management Plan (EMP) to conserve the resources, minimize the waste generation, treatment of waste, recovery of by products and recycling of material. It will also take into consideration vegetation and landscaping of open area, and also The post project quality monitoring to ensure and check compliance to proposed mitigation measures and preservation of environmental quality is integral part of EMP.

Management has made following budgetary allocation to ensure EMP is properly implemented and no financial constraints will be allowed.

The EMP will be carefully designed so as all the affected components/areas have been covered and monitored and mitigated as per requirement during construction and operation of proposed expansion cum modernization.

#### Budget provision for Environmental Management Plan

S.N	Environmental Aspect	Capital Expenditure Rs in Crores	Recurring Expenditure Rs in Crores (per
1	Emission control Engineering	0.95	0.50
2	Water & Wastewater management	1.50	1.00
3	Solid Waste	0.80	0.12
4	Greening Drive	0.70	0.10
5	Monitoring	0.30	0.10
6	Environmental Cell & PR	0.25	0.08
7	Other aspects like Rain Water Harvesting, Safety, Security etc.	0.50	0.10
	<b>Total</b>	<b>5.00</b>	<b>2.00</b>

#### The following aspects have been covered under EMP

1	Air Pollution Control	Provision of multicyclones for fly ash collection
2	Water Pollution Control	ETP to ensure zero discharge, STP with septic tank
3	Water conservation	Recycling of condensate water from distillation and cogeneration
4	Noise Pollution Control	Provision of vibration isolators, acoustic
5	Environment Monitoring and Management	Planned monitoring of air, water, noise and soil parameters
6	Occupational Health	Regular health check-up of the workers
7	Green Belt	Tree Plantation
8	Safety management.	Safety measures like ear muffs , gloves, helmet shoes, goggles, aprons to the workers

#### ENVIRONMENT MANAGEMENT CELL

A separate Environment Management Cell will be established to look after the Effluent Treatment Facility and to monitor and control the environmental quality. Members of the Environmental Cell would be well qualified and experienced in the concerned field. Some of the routine tests of wastewater such as pH, solids, temperature, etc. will be carried out in the laboratory of distillery. However, for additional tests of water, wastewater, soil, air etc. services of reputed laboratories as well as that of a consultant would be hired.

#### CONCLUSION

- Setting up of a Molasses based distillery unit will be helpful to the industrial development in this region.
- The use of Molasses by the distillery will help the farmers in this region for marketing their products i.e. Sugar Cane and get extra benefits by value addition.

- Molasses generated by neighbouring sugar industries will be used for useful financial benefits
- The project will be a boon to the farmers indirectly as factory will need molasses from nearby sugar industries who in turn will need sugar cane as raw material.
- The sale of alcohol will generate large amount of revenue by way of excise duties levied on the local front
- The distillery will also generate direct employment to a large number of local skilled, semi- skilled and unskilled workers. The distillery can also generate revenue for local population by the services that they render to the industry
- Project implementation will induce infrastructural development in the surrounding villages i.e. educational, social institutions, cultural institutions, health care facilities, road development, sewage treatment facilities etc.
- Safety council will be established by the safety officer to take safety steps for employees.

The promoter has selected industrial backward area in Maharashtra state. It would be advantageous to implement it as quickly as possible in order to improve the socio- economic in the area as it will improve the regional economy. Since the project is conceived as zero discharge project, self-sufficient in its electricity requirement and concerns of environment properly addressed, it may be recommended for early environmental clearance.

Thereafter, **Dr. Prabhakar N. Wavde** (Field Officer, MPCB, Jalgaon) appealed people to express their queries, objections, suggestions or comments regarding the proposed project. The details of the questions raised by the people during the public hearing and the replies given by project proponent or his representative are given below.

#### PROCEEDINGS:

Sr. No.	Issue raised by people	Reply of project proponent	Suggestion made by public hearing panel
1	<b>Shri Gajanan Pandurang Mali (Village Pimpri)</b> asked that whether the proposed project will lead to water pollution in the region.	<b>Dr Prashant Banne</b> replied that the proposed distillery project will be having zero liquid discharge. The effluent generated from the process will be utilized back in the process and will be used on land for gardening and no single drop of treated / untreated water will be discharged outside the premises.	---
2	<b>Shri Ulhas Hari Dhayade</b> enquired about the quantity of fresh water required for the proposed project and the scope to locals	<b>Dr Prashant Banne</b> said that initial water requirement is 405 M <sup>3</sup> /Day. Effluent generated from the process will be recycled up to 150 - 200 M <sup>3</sup> /Day and thus the water requirement will be	---



	in employment which will be generated in the proposed project.	decreased later on. He explained that preference will be given to locals for employment and if technical / managerial staff having necessary educational qualification and / or experience is not available among locals then it will be recruited from outside.	
3	<b>Shri Suresh Vikram Patil</b> enquired about the possible land pollution due to the proposed distillery project and arrangements proposed for waste water treatment.	<b>Dr Prashant Banne</b> said that the proposed unit will be having zero liquid discharge arrangement, in which waste water generated from process will be utilized in the process up to maximum extent and remaining will be utilized on land for gardening and there will no discharge treated / untreated effluent on land. Therefore there will be no water or land pollution from the proposed project.	---
4	<b>Shri Shrikrishna Mali</b> enquired whether the existing boiler(s) of sugar factory will be utilized for proposed distillery or new boilers will be installed.	<b>Shri Sudarshan Kendre (PRAJ Engineering, Pune)</b> said that new boilers will be installed for the proposed project with separate air pollution control arrangement and stack of adequate height.	---
5	<b>Shri Yogesh Kolate</b> enquired whether funds provided under corporate social responsibility as showed in presentation, will be utilized only if the industry gains profit or utilized in any situation.	<b>Project Proponent Shri Shivaji Jadhav</b> said that the funds under corporate social responsibility will be utilized once the industry start gaining profit. The funds will be utilized for developmental works like road repairing etc.  <b>Shri Sudarshan Kendre (PRAJ Engineering, Pune)</b> explained that initial water requirement is 405 M <sup>3</sup> /Day and effluent generated from the process will be treated in ETP and utilized back in the process up to maximum extent and remaining effluent will be	<b>Shri R. U. Patil, Regional Officer, MPCB, Nashik</b> instructed project proponent to explain details about water and air pollution control arrangement, zero liquid discharge system in the proposed project and provision for groundwater recharge / rainwater harvesting etc.  <b>Chairman of Public</b>

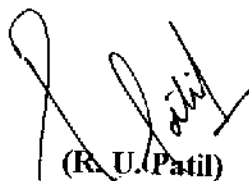
		<p>utilized on land for gardening. There will be massive tree plantation within and around the factory premises where the treated effluent will be utilized. There will be no compost yard in the project. He added that there will be no groundwater pollution from the project as there is no discharge of treated / untreated effluent on land. Arrangements will be provided for rain water harvesting within the premises. He further explained that for controlling air pollution, electrostatic precipitator will be provided to the boiler, which has 99.99 % efficiency. He informed that EIA study reveals that there will be only 0.02 % increase in the concentration of particulate matter and that too within the 0.95 meters area from the project.</p> <p><b>Dr, Prashant Banne</b> said that as per norms of Environment Ministry plantation should be carried out on 33 % of the open land and tree plantation is proposed on total 35.74 Ha land in the project. This plantation will be carried step by step in five years. He added that more tree plantation will also be carried out in the open land and local plant species will be planted.</p>	<p><b>Hearing Panel Shri Goraksh Gadilkar</b> (Additional District Magistrate, Jalgaon) enquired about the proposed tree plantation in the project. He added that local plant species should be planted.</p>
6	<p><b>Shri Gajanan Ahire</b> (Village Ghodasgaon) enquired whether there will be a local committee to monitor the things in future</p>	<p><b>Dr Prashant Banne</b> said that there will be separate environment cell in the factory to take care of all environment and pollution control related activities and there will be management team for utilization of CSR.</p>	---

7	<p><b>Shri Umesh Tayade (Village Kandgaon)</b> enquired about possible air pollution and river water pollution that may cause due to proposed distillery unit.</p>	<p><b>Dr. Prashant Banne</b> said that effluent generated from the process will be treated in ETP and utilized back in the process up to maximum extent and remaining effluent will be utilized on land for gardening. Thus there is no question of river water pollution.</p> <p>He further explained that for controlling air pollution, electrostatic precipitator will be provided to the boiler, which has 99.99 % efficiency. He added that EIA study reveals the increase of only 0.02 % in the concentration of particulate matter and that too within the 0.95 meters area from the project.</p>	---
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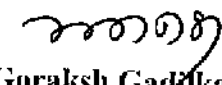
**Chairman Shri Goraksh Gadilkar (Additional District Magistrate, Jalgaon)** appealed participants to express their views, if any about the project. Thereafter nobody came forward. He said that views expressed by participants are recorded and will be incorporated in the minutes of public hearing. He instructed project proponent to carry out tree plantation at the open land within and around the project and also to undertake various developmental works with consultation with gram-panchayat. He then declared that the public hearing is concluded.

  
(A. M. Kare)

Convener of Public Hearing  
& Sub Regional Officer,  
MPCB, Jalgaon

  
(R. U. Patil)

Member of Public Hearing  
Panel & Regional Officer,  
MPCB, Nashik

  
(Goraksh Gadilkar)

Chairman of  
Public Hearing Panel &  
Additional District Magistrate,  
Jalgaon