

**Report on  
Fire at Asau and Aopo  
8 - 16 September 2008**

### **1. Background**

According to the report provided by the Climate Services of the Meteorology Division, the rainfall recorded in the current dry season is less if compared to the rainfall in the same period in the 2007. For the month of August to September 2008, drought warning has been issued for the North West part of Savaii where Aopo and Asau is located.

The wind speed for this dry season ranged from 10 to 15 knots gusting up to or more than 20 knots.

This report is being prepared to provide details of the fire at Asau and Aopo including the response actions undertaken by the Government Ministries and Corporations, private sector, Non-Governmental Organisations, individuals and the villages that were affected by the fire.

### **2. Areas affected and impacts**

The fire that affected agricultural land of Asau started on Saturday 6<sup>th</sup> of September 2008 and it is suspected that this fire was caused by burning of vegetation and trunks to clear land for plantations. Due to the number of new fires that started further away from the original area affected, suspicions of arson was established and the Ministry of Police is currently undertaking an investigation to confirm the cause of this fire.

With regards to the fire at Aopo, it was reported that it started on Monday 8<sup>th</sup> of September 2008 within the road reserve area and suspected to have been caused by a cigarette butt being thrown out from a traveling vehicle. Two causes have been established that is cigarette butt or arson. Therefore the cause of this fire is not confirmed yet until the Ministry of Police's investigation is completed.

The fire at Aopo was reported to the Fire Service on Monday 8<sup>th</sup> of September 2008 at about 3pm however the fire at Asau was not reported until the Fire Service crew from Salelologa arrived on scene.

While the response teams were trying to extinguish the fire at Aopo and Asau, two other fires were reported to the Incident Command Post. One was in Auala affecting Sofi Wulf's land and the other one was affecting the saw mill at Asau. The latter was also affected by a fire which occurred on the 30<sup>th</sup> of August 2008 and lasted for 3 days. A response team was sent to these sites and managed to fully extinguish them before they got out of control.

In terms of impacts, the Asau area sustained damages to the plantations of about 29 families. These plantations were mainly taro, giant taro, banana, coconut, cocoa, kava, natural forest and vegetation (refer to Annex 5 for details).

In Aopo, the fire affected plantations that belong to about 11 families. These plantations included taro and giant taro, banana, coconut, yams, kava, timber trees such as teak, pandanus and breadfruit. The fire also affected the power poles; native forest and vegetation (refer to Annex 5 for details).

The fire did not affect any residential houses in both villages as they were further away from the fire grounds however on Sunday 14<sup>th</sup> of September 2008, the fire in Aopo on the coastal side of the road was about 100 meters from the houses that belongs to one of the high chiefs of Asau (Fao Avau). Though this house was not occupied at the time of the fire, priority was still given to this house to prevent it from being affected.

Despite the fact that no one from the villages affected got injured, few response personnel were treated for minor injuries ranging from blisters to sprained ankles. The Sataua District Hospital was setup by the National Health Services as the emergency health service provider for any casualties from the affected areas. Two medical doctors were on shifts to take turns in manning this hospital as well as visiting the camps to check the response personnel for injuries and health problems sustained due to the fire. Samoa Red Cross Society applied first aid to injured response personnel and delivered them to the Sataua District hospital for proper check up and treatment (Refer to Annex 3 for details).

### **3. Response actions that were undertaken and assistance provided to the affected areas**

From Monday 8<sup>th</sup> September 2008, the Fire and Emergency Services Authority and the Disaster Management Office began communication with the Samoa Shipping Corporation for the transportation of fire fighters and fire appliances to Savaii and at the same time, deployed the Salelologa Fire Service crew to begin extinguishment and report the status of the fire to determine the next steps. The Electric Power Corporation office in Savaii was contacted immediately to deploy personnel to check the power poles and monitor electricity as it was reported that the fire in Aopo was affecting both sides of the road including the power poles. The Samoa Water Authority office in Savaii was also contacted to check the hydrants and water levels in the affected area. The Office of the Attorney General was also informed of the situation and requested to be on standby in case a declaration of disaster is required to be made. The member agencies of the Disaster Advisory Committee were also informed of the situation and were requested to be on the standby in case the fire gets out of hand and that mobilization of resources is required.

On Tuesday 9<sup>th</sup> of September 2008, an additional crew of 12 fire fighters including the Commissioner of the Fire Service including 1 fire appliance left for Savaii to assist in controlling and extinguishing the fire. One personnel from the DMO also left on the same day to undertake an assessment of the status of the fire, provide reports and coordinate the resources that was needed for the operation. Upon arrival at Asau and Aopo, situation reports were compiled and the Forestry Division office at Asau was then set up as the Incident Command Post. The Commissioner of the Fire and Emergency Services Authority was designated as the Incident Controller and the Principal Disaster Management Officer was appointed as the Incident Control Point. The Disaster

Management Office at the Meteorology Office in Mulinuu was designated as the National Emergency Operation Center.

About 8 situation reports were prepared and issued from the Incident Command Post for this operation since Monday 8<sup>th</sup> of September 2008. The situation reports were given to the member agencies of the Disaster Advisory Committee, Chairman of the National Disaster Council and the media. The second situation report which was issued on Tuesday 9<sup>th</sup> of September 2008, made a recommendation to the Chairman of the National Disaster Council to declare Asau and Aopo as disaster areas in accordance with section 19 of the Disaster and Emergency Management Act 2007. However this recommendation was deferred pending further updates and was eventually withdrawn upon issuance of the third situation report on Wednesday 10<sup>th</sup> of September 2008. On Thursday, winds started to pick up again causing fire to spread dramatically in all directions in the affected areas of the two villages. For this reason, situation report number 4 made a recommendation to the Chairman of the National Disaster Council to make the Declaration of Disaster for Aopo and Asau. This recommendation was accepted and on Friday evening the Declaration was signed and became effective for 48 hours.

On Sunday 14<sup>th</sup> of September 2008, situation report number 6 made a recommendation for an extension of the Declaration for another 48 hours as the fire was not fully contained and extinguished at the time the first 48 hours ended. The extension for the next 48 hours was endorsed and became effective on Sunday 14<sup>th</sup> September 2008 at 5pm. On Tuesday 16<sup>th</sup> September 2008, the mop up operation in the affected areas ceased and at 2pm on the same day, the Incident Controller, Commissioner of the Fire and Emergency Services Authority declared the affected areas in both villages as safe. The 8<sup>th</sup> and final situation report was then prepared and issued to the Disaster Advisory Committee and the National Disaster Council for their information. The Incident Command Post at Asau and the National Emergency Operation Center at Mulinuu were also officially closed on the same day.

The services of the water tankers ceased on Monday evening 15<sup>th</sup> September 2008 and on Wednesday 17<sup>th</sup> of September 2008, the response personnel and vehicles from Upolu returned while the response personnel from Savaii returned home on Tuesday 16<sup>th</sup> of September 2008.

Fire breaks were made to control and contain the fire while the water was used to extinguish it. Fire beaters, riggas and knapsacks were used to control and extinguish the fire in areas where water tankers and fire appliances could not access. The first priority was given to high risk areas where the possibility of the fire spreading to residential areas of and plantations in both villages was high. Strong winds, changing wind directions and heat made it so difficult for the response personnel and the resources to contain the fire. However on Sunday evening 14<sup>th</sup> September 2008, it started to rain for about two hours. On Monday morning and Tuesday afternoon, it rained again though not much. Hence on Monday 15/09/2008 and Tuesday 16/09/2008, the response personnel focused on putting out the hot spots and ensuring that the affected areas were totally extinguished.

Additional resources were provided by the response agencies. Samoa Red Cross Society arrived on site on Tuesday evening 9<sup>th</sup> September 2008 with water bottles for drinking water, food items, first aid, radio communication equipment and personnel. This agency took full responsibility for drinking water including fetching drinking water from Tuasivi and delivering them to the response teams; application of first aid, provision of ambulance service, liaising with the Sataua District Hospital and managing radio communication using their VHF radios and repeaters.

The National Health Services assisted in setting up the Sataua District Hospital as the the emergency health service location to cater for casualties in the affected areas. Two medical doctors, nurses and medical supplies were deployed to Sataua district hospital to meet the medical needs of the response teams as well as civilians from the two villages. It also deployed 3 water tanks, 1 truck and 6 personnel to assist in extinguishing the fire.

The Ministry of Works assisted the operation through the deployment of road contractors that have water tankers to assist in supplying water. This assistance also included 4 personnel from the Ministry and two Ministry vehicles.

The Forestry Division of the Ministry of Natural Resources and Environment assisted in providing response personnel, accommodation for the Samoa Red Cross, Ministry of Police, and the Fire Service additional crew that arrived on scene on Friday 12<sup>th</sup> September 2008, slip on unit, water pumps and tanks, vehicles, office for the Incident Command Post, cooking the meals for the response personnel, provision of one mechanic and the use of their workshop to repair hoses, water pumps and fire appliances. The majority of the response personnel from this office focused on containing and extinguishing the fire in Asau and Masamasa.

The Samoa Shipping Corporation was responsible for making the arrangements for transportation of response personnel, vehicles and other resources to Savaii.

The Samoa Victim Support organisation though not a member of the Disaster Advisory Committee offered its services in providing food items and cooks to prepare meals for the response personnel under its current Memorandum of Understanding with the Fire and Emergency Services Authority. From Monday 15/09/2008 to Tuesday 16/09/2008, this organization took full responsibility for the preparation of meals for the response teams.

The Ministry of Police through its office in Tuasivi, was responsible for law and order in the affected areas as well as security for the response personnel. The Ministry was also in charge of the investigation into the causes of the fire in Asau and Aopo in liaison with the Village Councils of the two villages.

Digicel assisted the operation through the setup of a user group for key response personnel and had provided \$50.00 for these key personnel. It also donated 1 blackberry and credits up to \$250 tala for the Disaster Management Office to enable email access and to assist in resource coordination. The company also donated food items for the

response personnel valued at \$1000 tala as well as the delivery of food items and other resources to the Incident Command Post.

SamoaTel assisted the operation through the provision of \$100.00 tala credits to the mobiles of key response personnel subscribed to the Go-moible network as well as relocating 2 telephone lines for the National Emergency Operation Center at Mulinuu.

There were also other companies and individuals that provided assistance for the operation and a detailed list is attached in Annex 2 of this report.

There were about 136 response personnel on the fire grounds and the Incident Control Post and 5 personnel from the DMO and other sections of the Meteorology Division manned the National Emergency Operation Center.

The total cost of the whole operation is \$163,995.07. Attached as Annex IV to this report is the Expenditure Statement with relevant details.

#### **4. Observations and issues**

- ❖ The burning of the vegetation to clear land for agriculture purposes as well as deliberate burning had prolonged the operation;
- ❖ Strong winds and changing wind directions had made it difficult to control and contain the spread of the fire in the affected areas;
- ❖ There was no mapping capability such as Map Info software available at the Forestry Office in Asau and only one GPS was available which made it difficult to map out the affected areas;
- ❖ Radio communication was seen as crucial to this operation and or any other operation;
- ❖ The response personnel that were on site have limited understanding of how response operations are managed in particular under a declaration;
- ❖ There are no criterias to determine when a Declaration of Disaster or a Proclamation of Emergency is to be made;
- ❖ There was sufficient supply of water available to supply the water to extinguish the fire in the affected areas as well as response personnel and resources;
- ❖ The response from the member agencies of the Disaster Advisory Committee was quite fast in allocating the resources available through their networks as well as other companies and individuals who are not members of DAC;
- ❖ There was strong support from individuals as well as some families of Aopo and Asau for the response personnel;

#### **5. Recommendations**

Immediate to short term

It is recommended that :

- ❖ A Regulation be developed to set out the criterias to determine when a Declaration of Disaster and or Proclamation of Emergency is to be made (MNRE, DAC);
- ❖ The procedures for execution of response is reviewed and improved to ensure that response agencies and their personnel are clear of their roles and responsibilities

during any disaster or emergency event and that the cost of any response operation is controlled (MNRE, DAC);

- ❖ Provisions to address burning of rubbish during the dry season is included in the Waste Management Bill including appropriate charges for those who will not comply (MNRE);
- ❖ A sub-fire station is established at the Asau Forestry Office given the high vulnerability of this part of Savaii to bush fires during the dry season. This sub-station can be equipped with quick response units to enable response to any type of fire and other types of emergencies such as hazardous chemical spills, an ambulance to cater for medical emergencies in this area, a siren that will be used to alert any fire and provide early warning for tsunamis and other natural hazards (FESA, MNRE);
- ❖ Appropriate provisions be made in the national fire plan to enforce a national fire ban during the dry season (MNRE, FESA);
- ❖ MOUs be made between DAC and companies with water tankers as well as other heavy machinery that could be used during any fire event and other disasters (FESA, MNRE);
- ❖ MOUs be made between DAC and wholesalers to facilitate supply of food items during any disaster or emergency event for response personnel as well as evacuees in shelters if the need for evacuation arises (MNRE, DAC);
- ❖ The fire extinguishing equipments with the Forestry offices be assembled and transferred to the Fire and Emergency Services Authority for refurbishment, safekeeping, maintenance and on going checks to ensure functionality at all times (FESA, MNRE);
- ❖ Additional fire appliances be procured and that career fire fighters must be strategically increased to cater for potential increase in fire events given continuous changes to climate conditions (FESA);
- ❖ A mapping capability such as Map Info software and GPS be made available to the Forestry Office in Asau to enable development of maps of fire affected areas and that this same office be properly fitted out so that future fire events can be effectively and efficiently coordinated from this office (MNRE);

In the long term, it is recommended that:

- ❖ A cadre of volunteer fire fighters be established out of Government Ministries and Corporations employees' and that they are properly trained in fire fighting skills to ensure that availability of sufficient of fire fighting personnel in the future (FESA, MNRE);

**I. Pictures of affected areas in Asau and Aopo, 8 – 16 September 2008:**









## II. List of resources and assistance provided:

| Agencies  | Personnel  | Other resources  |
|---|--|--|
| 1. Fire and Emergency Services Authority<br>(* All fire appliances have been equipped with appropriate fire fighting equipment) | 37   | <ul style="list-style-type: none"><li>- 2 pumper trucks</li><li>- 1 tanker with water capacity of 17000 liters</li><li>- 1 delivery pumper truck</li><li>- 1 ambulance</li><li>- 1 landcruiser</li></ul>   |
| 2. Ministry of Natural Resources and Environment  | 54 from Forestry Office in Asau, 3 DMO and 3 from other sections of the Meteorology Division | <ul style="list-style-type: none"><li>- 2 trucks</li><li>- 2 single cap utilities</li><li>- 1 slip on unit (water tank and pump and hoses)</li><li>- 1 water tank &amp; 3 water pumps</li><li>- 2 landcruiser</li><li>- Office and living quarters for the response personnel</li><li>- 16 knapsacks, 20 buckets 21 barrels</li><li>- 1 chainsaw</li></ul> |

|                                  |  |  |
|----------------------------------|--|--|
|                                  |  | <ul style="list-style-type: none"> <li>- workshop</li> <li>- telephones &amp; facsimile</li> </ul>   |
| 3. Samoa Red Cross               | 14   | <ul style="list-style-type: none"> <li>- 7 water bladders with water capacity of 2000 liter, 2 water bladders with water capacity of 5000 liters</li> <li>- 58 water bottles &amp; 1 cooler</li> <li>- 12 VHF handheld units, 2 repeater, 4 satellite telephones</li> <li>- 1 laptop, 1 printer</li> <li>- 2 chainsaws &amp; 13 rakes</li> <li>- first aid kits</li> <li>- 1 van, 1 double cap utility</li> <li>- biscuits, sacks of rice, cooking and eating sets, coffee, sugar</li> </ul> |
| 4. Ministry of Works             | 4 personnel from the Ministry + 11 personnel from water tanker companies | <ul style="list-style-type: none"> <li>- 2 double cap utilities</li> <li>- 2 water tankes</li> <li>- 4 contractors providing a total of 7 water tankers (Sakalafai Contractors (2 tankers), Magele Osa (1 tanker), Apia Lua (1 tanker &amp; a water pump), Lady Miriama (3 tankers, 3 water pumps)</li> </ul>  |
| 5. National Health Services      | 6 personnel, 2 doctors and a number of nurses                            | <ul style="list-style-type: none"> <li>- 3 water tanks &amp; 1 truck</li> <li>- setup and manning Sataua district hospital, medical supplies</li> </ul>  |
| 6. Ministry of Police and Prison | 9  | <ul style="list-style-type: none"> <li>- 1 double cap utility</li> </ul>   |
| 7. Digicel                       |  | <ul style="list-style-type: none"> <li>- 1 black berry for DMO, \$250 credits</li> <li>- \$50.00 credits for key response personnel at Asau and Mulinuu and user group for the key personnel to enable free calls for members only</li> <li>- 5 torches, 1 box of batteries</li> </ul>   |

|                               |              |   |
|-------------------------------|--------------|---|
| 8. SamoaTel                   | 3 personnels | <ul style="list-style-type: none"> <li>- 1 double cap utility</li> <li>- 2 telephone lines for NEOC at Mulinuu</li> <li>- \$100.00 tala credits for key response personnel</li> </ul> |
| 9. Samoa Shipping Corporation |              | <ul style="list-style-type: none"> <li>- arrangements for transportation of response personnel and vehicles to and from Savaii</li> </ul>   |
| 10. Samu Anderson             | 2            | <ul style="list-style-type: none"> <li>- 1 water tanker and water pump</li> </ul>   |
| 11. Asco Motors               |              | <ul style="list-style-type: none"> <li>- 1 water pump</li> </ul>  |
| 12. BOC                       |              | <ul style="list-style-type: none"> <li>- 2 water pumps &amp; rods</li> </ul>  |
| 13. RT Hill                   | 1 mechanic   | <ul style="list-style-type: none"> <li>- repairing Salelologa fire station pumper truck</li> <li>- delivery of water pumps from Asco Motors and BOC</li> </ul>                        |

#### **Food items for response personnel**

|   |                     |  |
|---|---------------------|--|
| 1. Digicel (contributed food items valued at \$1000.00) |                     | <ul style="list-style-type: none"> <li>- 6 can of biscuits</li> <li>- 1 half bag of sugar</li> <li>- 2 cartons of chicken</li> <li>- 3 bags of rice</li> <li>- 20lbs vermicelli</li> <li>- 2 bags of coffee</li> <li>- 4 packets of onions</li> <li>- 2 packets of salt</li> <li>- 6 bottles of cooking oil</li> <li>- 1 packets of curry powder</li> <li>- 1 doz soy sauce</li> <li>- 2 packets of garlic</li> <li>- 5 pepa tai sefulu o pepa mo fale le taua</li> <li>- 2 x 1kilo o le pata</li> </ul> |
| 2. Samoa Victim Support                                 | 4 tagata faigaluega | <ul style="list-style-type: none"> <li>- 2 pusa pisupo</li> <li>- 3 pusa eleni</li> <li>- 1 pusa susu</li> <li>- 10lbs lialia</li> <li>- 10 falaoa</li> <li>- 25lbs suka</li> <li>- aniani, masima, kale,</li> </ul>   |

|  |  |  |
|--|--|--|
|  |  | <p>fagu sosi</p> <p>- 22 taga aisa, 5 pusa fagu vai, 1 kula</p> <p>- 2 fagu kofe</p> <p>- 3 fagu vailanu,</p> <p>- 1 x 1lb pata</p> <p>- 2 pusa moa</p> <p>- 2 taga araisa</p> <p>- 3 pepa tui, 140 ipu pepa, 100 ipu inu</p> <p>- 5 pusa pepa keke</p>  |
| <b>TAGATA TAITOATASI :</b>                     |  |  |
| 3. Archbishop Mataeliga                        | Billet   | - 1 povi, 20 bread & 3lbs butter   |
| 4. Rev. Namaia & Rev. Alapati CCC of Falealupo |  | - Sunday lunch for response personnel  |
| 5. Rev. Alapati of CCC of Tufutafoe            |  | - Sunday lunch for response personnel  |
| 6. Rev. Eteuati o le EFKS Sataua               |  | - Sunday lunch for response personnel  |
| 7. Asau  | <p>- Chiefs and orators, untitled men and women who assisted in making fire breaks</p> | <p>- 5 x 3lbs corn beef, 8 x 12oz corn beef, 1 x 1lb corn beef, 6 cans luncheon meat, 2 cans spaghetti, 2 alaga puaa, 1 carton tin fish, 2 bushels of giant taro, 1 bushel of breadfruit; 80 lunch plates from the untitled men and women of Asau</p> <p>- Asau spring which supplied the water to extinguish the fire</p> |
| 8. Misivao Panoa (Matai Asau)                  |  | - falaoa, suka pata, kofe mo le aufaigaluega   |
| 9. Fao Ualesi (Tuua o Asau)                    |  | - 2 pusa apa, 5lbs suka, 1 lb pata, 20 falaoa mo le aufaigaluega   |
| 10. Tufuga Selota (Matai Asau)                 |  | - koko araisa; taumafataga mo le aufaigaluega mo le lua aso  |
| 11. Aopo                                       | <p>- alii ma faipule, aumaga sa fesoasoani ile taina o vavae o le afi i Aopo</p>       | - taumafataga mo le aufaigaluega   |
| 12. Pamu penisini a Dan Mua                    |  | - utuina o taavale, suauu mo iliafi ma pamu vai  |

|  |  |   |
|--|--|---|
| 13. Lyn Netzler                                    |  | - utuina o le taavale DMO<br>mo le ofisa tutotonu i<br>Mulinuu  |
| 14. Aiga o le alii tinei mu<br>o Matau Esau i Asau |  | - fale apitaga mo le<br>aufaigaluega a le Pulega o<br>Tinei e 27 e aofia ai ma le<br>tausiga ile taeao ma le<br>afiafi mo aso e 9 |
| 15. Faleoloa o Saleimoa<br>Vaai                    |  | - tatalaina o le aitalafu e<br>sapalai ai mea fai meaai<br>mo le aufaigaluega   |
| 16. Vailima Breweries                              |  | - 7 pusa pia lapopoa mo le<br>aufaigaluega ina ua maea<br>le galuega ile Aso<br>16/9/2008   |

### III. Lipoti o manuaga ma togafitiga



Samoa Red Cross Society

#### EMERGENCY OPERATION – INJURY REPORT

| INJURY   | TREATMENT  | 13.09 | 14.09 | 15.09 | 16.09 | COMMENTS  |
|--|--|-------|-------|-------|-------|---|
| 2 <sup>nd</sup> degree burn to right inner wrist with open blister | Cleansed – applied antiseptic cream, dressing            | ✓     | ✓     | ✓     | ✓     | Almost completely healed, no signs of infections noted.                                   |
| Pain to right wrist  | Ice and compress   | ✓     |       |       |       | Seen by Dr. Arun and referred to MTII hospital for x-ray and further treatment.           |
| Chest pain and cough   | Care on the spot, slow deep breaths and made comfortable | ✓     |       |       |       | Admitted to Sataua hosp and was on oxygen therapy for 2 hrs & discharged. Rest x 1½ days. |
| Crushed right index fingernail                                     | Ice – cleansed & applied antiseptic cream, dressing      | ✓     | ✓     | ✓     | ✓     | Improved, offered no complaints of pain and no  |

|  |   |   |   |   |     |   |
|--|---|---|---|---|-----|---|
|  |   |   |   |   |     | signs of infection.   |
| Abrasions from gum boots – bilateral lower limbs                     | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | d/c | Healed, treatment discontinued.   |
| Cuts with slight bleeding below left knee                            | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | ✓   | Healing, no signs of infections   |
| Open blisters right hand palm  | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | d/c | Healed. Treatment discontinued.   |
| Abrasions from gum boots bilateral lower limbs                       | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | d/c | Healed. Treatment discontinued  |
| Throat pain and irritation, headache                                 | Panadols 500mg orally. Taken to Sataua Hosp.  | ✓ |   |   |     | Seen by Dr. Arun – diagnosed with throat infection. Prescribed ATBs and Benadryl for cough and Panadols – to rest for 1 day |
| Cut lower left leg   | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | ✓   | Healing – wound clean, no signs of infection noted – last treatment   |
| Cut to top of right hand   | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | ✓   | Wound clean, no signs of infection noted. Healing   |
| 2 <sup>nd</sup> degree burn with open blister to top of right hand   | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | d/c | Healed. Treatment discontinued  |
| Abrasions to left shin   | Cleansed & applied antiseptic cream, dressing | ✓ | ✓ | ✓ | d/c | Healed. Treatment discontinued  |
| Pain to lower back   | Ice   | ✓ | ✓ |   |     | Improved. No complaints   |
| Abrasions bilateral lower limbs                                      | Cleansed, applied antiseptic cream, dressing  |   | ✓ | ✓ | ✓   | Healing well. Last treatment & discontinued   |
| Open blister right lower leg   | Cleansed, applied antiseptic cream, dressing  |   | ✓ | ✓ | ✓   | Healing well. Last treatment & discontinued   |
| Open blisters bilateral back of heels                                | Cleansed, applied antiseptic cream, dressing  |   | ✓ | ✓ | ✓   | Healing well. Last treatment & discontinued   |
| Open crazed wounds to right foot – big toe and 4 <sup>th</sup> digit | Cleansed, applied antiseptic cream, dressing  |   | ✓ | ✓ | ✓   | Wounds look clean and healing well. No signs of infection noted   |
| Sprain left knee   | RICE  |   |   | ✓ | ✓   | Compression for support at time of duties   |
| Open cut – 3 digits to right hand                                    | Cleansed, applied antiseptic cream, dressing  |   |   | ✓ | ✓   | Wounds look clean & healing well, no signs of infection noted   |
| Open cut to left posterior ankle                                     | Cleansed, applied antiseptic cream, dressing  |   |   | ✓ | ✓   | Wound clean, healing well no signs of infection noted   |
| Open cut to below left knee  | Cleansed, applied antiseptic cream, dressing  |   |   | ✓ | ✓   | Wound clean, healing well no signs of infection noted   |
| Open cut to right calf area  | Cleansed, applied antiseptic                  |   |   |   | ✓   | Dressing change at night,   |

|                                    |  |  |  |   |   |
|------------------------------------|--|--|--|---|---|
|                                    | cream, dressing                              |  |  |   | wound looks clean – advised to visit hosp for dressing change   |
| Contused third digit of right foot | Cleansed, applied antiseptic cream, dressing |  |  | ✓ | Dressing change at night, complaints of slight pain. RICE   |
| Abrasion to right shin             | Cleansed, applied antiseptic cream, dressing |  |  | ✓ | Dressing change at night, no redness or swelling noted  |
| Sprain left ankle                  | RICE   |  |  | ✓ | Cont'd RICE every 4 hrs. re-assessed in the morning, swelling noted with pain. Notified Fire Commissioner and advised seek medical assistance for x-ray and further treatment when arriving back in Apia. |

**COMMENTS:**

The environmental conditions due to the hot sun and heat from the fire posed great concerns for the safety and the well being of the fire fighters as well as the forestry crew. Oral fluid re-hydration had been encouraged and plenty of water had been delivered to everyone along with Panadols that had been requested for headaches, body aches and pain throughout the days of the operation.

The medical doctor had been on site due to a request to pay a visit to the fire fighters for check up at night and advises were given regarding smoke inhalation and health tips on how to protect themselves.

Body massages was a big demand and had been provided.

Gave moral support for all those involved in the emergency operation and fortunately there had not been any serious or major injuries throughout the operation.

#### IV. Expenditure Statement

**EXPENDITURE STATEMENT**  
**FIRE AT ASAU AND AOPO**  
**8 - 16 SEPTEMBER 2008**

| Date        | Particulars          | Supplier   | Details  | Invoice number | Cost      | Total     |
|-------------|----------------------|--|--|----------------|-----------|-----------|
| 8-          |                      |  |  |                |           |           |
| 16/09/2008  | Fuel                 | Asau Service Station                             | Fuel for all vehicles use during the operation   | 101            | 14,104.50 |           |
| 14/09/2008  |                      | T & L Netzler Ltd                                | 70 liters of petrol for NREM13 - DMO Vehicle use for NEOC at Mulinuu   | 50265          | 224.24    |           |
| 12/09/2008  |                      | Filomena Nelson (DMO)                            | Petrol for NREM 19 - DMO Vehicle for ICP at Asau/Aopo  |                | 180.00    | 14,508.74 |
| 9/09/2008   | Food items           | T.M.Transport                                    | Refer sheet " Food"  | 285443         | 100.00    |           |
| 12/09/2008  |                      | Alto Co Ltd.                                     | Refer sheet " Food"  | 218306         | 813.00    |           |
| 9,          |                      | STTAR INDUSTRY                                   | Refer sheet " Food"  | 0640-          |           |           |
| 10,11,12,13 |                      |  |  | 0643,0645-     | 925.40    | 1,838.40  |
| &           |                      |  |  | 0647,0649-     |           |           |
| 16/09/2008  |                      |  |  | 0650           |           |           |
| 09/09/2008  | Accomodation         | Auga Seaside Resort                              | Accomodation for Incident Controller (Commissioner of Fire Service, Incident Command Post (PDMO) and Samoa Victim Support) | 332            |           |           |
| -           |                      |  |  |                | 2,513.00  | 2,513.00  |
| 16/09/2008  |                      |  |  |                |           |           |
| 13/09/2008  | Knapsack and buckets | Agriculture Store Corporation ARCO Chemicals Ltd | Refer sheet "Knapsacks_Buckets"  | 171092         | 3,710.00  |           |
|             |                      |  | Refer sheet "Knapsacks_Buckets"  | 5781           | 300.00    | 4,010.00  |

|            |                                  |                                       |   |           |                                       |           |
|------------|----------------------------------|---------------------------------------|---|-----------|---------------------------------------|-----------|
| 15/09/2008 | Notices                          | Radio Polynesia                       | Broadcasting of Declaration of Disaster on 12/09/2008                               | 9759      | 2,382.00                              | 2,382.00  |
| 10/09/2008 | Water Tankers & Loader           | Sakalafai Contractors                 | Hireage of 2 water tankers from 10 - 15 Sept 2008                                   | 44        | 15,424.91                             |           |
| 15/09/2008 |                                  | O N & Sons                            | Hireage of 1 water tankers from 10 - 15 Sept 2008                                   | 0012-0014 | 13,759.75                             |           |
| 10-        |                                  | Apia Lua                              | Hireage of 1 water tankers from 10 - 15 Sept 2008                                   | 312       | 8,816.68                              |           |
| 16/09/2008 |                                  | Samu Anderson                         | Hireage of 1 water tanker from 12 - 15 Sept. 2008                                   |           | 18,830.27                             |           |
|            |                                  | Lady Miriama                          | Hireage of 3 water tankers from 12 - 15 Sept  | 309       | 12,693.56                             | 69,525.17 |
|            |                                  | T.M.Transport                         | Hireage of 1 loader to smother fire   | 217716    | 3,540.00                              | 3,540.00  |
| 12/09/2008 | Water Pumps                      | Asco Motors                           | 1 Yamaha 3" water pump  | YA066-246 | 1,700.00                              |           |
|            |                                  | BOC Gases                             | 2 water pumps   |           | 11,073.65                             | 12,773.65 |
| 8-         | Ferrry                           | Samoa Shipping Corporation            | Ferry cost for transportation of vehicles and response personnel to and from Savaii | 11750     | 1,743.00                              | 1,743.00  |
| 16/09/2008 |                                  |                                       | Overtime  |           | Refer to sheet "Overtime & Allowance" | 25,297.42 |
| 8-         | Overtime and overnight allowance | Fire and Emergency Services Authority | Overnight Allowance   |           | 6,700.00                              | 31,997.42 |
| 16/09/2008 |                                  | Samoa Red Cross Soceity               | Overnight Allowance   |           | 2,150.00                              | 2,150.00  |

|                  |          |   |   |           |            |
|------------------|----------|---|---|-----------|------------|
|                  |          | Ministry of Works,<br>Transport &<br>Infrastructure | Overtime  | 1,835.18  | 1,835.18   |
|                  |          | Ministry of Natural<br>Resources &<br>Environment   | Overtime for 59 casual workers and<br>11 staff from Forestry and<br>Meteorology Divisions of MNRE   | 13,978.51 |            |
|                  |          |   | Overnight Allowance   | 200.00    | 14,178.51  |
| 8-<br>16/09/2008 | Donation | Laupao Esau   | Donation for providing<br>accommodation and meals for 26 fire<br>fighters from Salelologa and Upolu | 1,000.00  | 1,000.00   |
|                  |          | Grand Total   |   |           | 163,995.07 |

**V. List of properties affected by the fire at Aopo and Asau**

| Name                     | Type of crop |            |                |          |             |       |                |              | Size of land |
|--------------------------|--------------|------------|----------------|----------|-------------|-------|----------------|--------------|--------------|
|                          | Taro         | Bana<br>na | Gian<br>t taro | Kav<br>a | Coc<br>onut | Cocoa | Timber<br>tree | Pandanu<br>s |              |
| <b>ASAU</b>              |              |            |                |          |             |       |                |              |              |
| 1. Masoe Toga            | ✓            | ✓          | ✓              | ✓        |             | ✓     |                |              | 4 acres      |
| 2. Tanielu Fereti        | ✓            | ✓          | ✓              | ✓        | ✓           | ✓     |                |              | 2 acres      |
| 3. Finau Masoe           | ✓            | ✓          | ✓              | ✓        | ✓           | ✓     |                |              | 4 acres      |
| 4. Masoe Koroseta        |              |            |                | ✓        | ✓           | ✓     |                |              | 3 acres      |
| 5. Vaisigano Semi        | ✓            | ✓          | ✓              | ✓        |             | ✓     |                |              | 2 acres      |
| 6. Falelaufai Alio       | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 7. Vaai Kamu             | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 8. Naea Apineru          |              |            |                |          | ✓           | ✓     |                |              | 1 acre       |
| 9. Falefia Ioane         |              | ✓          |                |          | ✓           | ✓     |                |              | 1 acre       |
| 10. Vaisigano Vise       | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 11. Malaefono Tupo       | ✓            | ✓          | ✓              | ✓        | ✓           | ✓     |                |              | 3 acres      |
| 12. Saemo Alapati        | ✓            | ✓          | ✓              |          | ✓           | ✓     |                |              | 2 acres      |
| 13. Tufuga Perenise      | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 14. Siufanua Jerry       | ✓            | ✓          | ✓              | ✓        |             | ✓     |                |              | 3 acres      |
| 15. Saitumua<br>Manaia   | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 16. Tiavolo Lomia        | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 17. Malaefono Euta       | ✓            | ✓          | ✓              |          |             | ✓     |                |              | 3 acres      |
| 18. Filemoni Lomia       | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 19. Masoe Lima           | ✓            | ✓          | ✓              |          |             |       |                |              | 2 acres      |
| 20. Tua'i Atonio         |              |            |                |          | ✓           | ✓     |                |              | 1 acre       |
| 21. Leituala Sale        | ✓            | ✓          | ✓              |          | ✓           | ✓     |                |              | 2 acres      |
| 22. Saitumua<br>Samusamu |              |            |                | ✓        | ✓           | ✓     |                |              | 1 acre       |
| 23. Lomia Vaeloto        | ✓            | ✓          | ✓              |          |             |       |                |              | 1 acre       |
| 24. Tautaifau            | ✓            | ✓          | ✓              |          | ✓           | ✓     |                |              | 2 acres      |

|                   |   |   |   |   |   |   |  |  |         |
|-------------------|---|---|---|---|---|---|--|--|---------|
| Faavesi           |   |   |   |   |   |   |  |  |         |
| 25. Tafea Fereti  | ✓ | ✓ | ✓ |   | ✓ | ✓ |  |  | 2 acres |
| 26. Samu Sio      | ✓ | ✓ | ✓ |   | ✓ | ✓ |  |  | 1 acre  |
| 27. Malau Fia     | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |  | 2 acres |
| 28. Iosua Leifi   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |  | 2 acres |
| 29. Fouina Tufuga |   |   |   |   | ✓ | ✓ |  |  | 1 acre  |
|                   |   |   |   |   |   |   |  |  |         |

### AOPO

|                   |   |   |   |   |   |   |   |   |                        |
|-------------------|---|---|---|---|---|---|---|---|------------------------|
| 1. Talia Lilo     |   |   |   |   | ✓ | ✓ |   |   | Range from 1 to ½ acre |
| 2. Filo Talapusi  |   | ✓ |   |   | ✓ |   |   | ✓ | Range from 1 to ½ acre |
| 3. Mulimai Leui   |   | ✓ |   |   |   |   |   |   | Range from 1 to ½ acre |
| 4. Malau Fia      |   | ✓ | ✓ |   |   |   |   |   | Range from 1 to ½ acre |
| 5. Pati Mika      | ✓ |   | ✓ |   |   |   |   |   | Range from 1 to ½ acre |
| 6. Mailata Onolua |   |   | ✓ |   |   |   |   |   | Range from 1 to ½ acre |
| 7. Asiasiga Lilo  |   | ✓ |   |   |   | ✓ | ✓ |   | Range from 1 to ½ acre |
| 8. Saumalu        |   | ✓ | ✓ |   |   |   |   |   | Range from 1 to ½ acre |
| 9. Tupai Tanielu  |   |   |   | ✓ |   |   |   |   | Range from 1 to ½ acre |
| 10. Vila          |   | ✓ | ✓ |   |   |   |   |   |                        |
| 11. Siaumau       | ✓ |   |   |   |   |   |   |   |                        |