

ENVIRONMENTAL MANAGEMENT PLAN

Version 5.0, February 21, 2018

Environmental and Social Management Framework specifies environmental and social procedures for implemented projects to adhere to, including Environmental Management Plan, which are consistent with WB Safeguard policies and Serbian national legislation.

Project IF ID: 705

I. MITIGATION PLAN

Phase	Issue	Mitigating Measure	Cost of Mitigation (If Substantial)	Responsibility*	Supervision observation and comments (to be filled out during supervision)
Construction	<ul style="list-style-type: none"> •Propane is a flammable gas and requires special transport and storage conditions. •Only trained workers can work with propane. •Safe manipulation with propane in the production facility. •Possibility of leakage of propane from heat 	<ul style="list-style-type: none"> •Choosing a reliable supplier that meets all the legal requirements prescribed for the suppliers of flammable substances. Enabling storage conditions according to the legislations for 	<ul style="list-style-type: none"> •Providing adequate storage conditions for propane requires additional costs. •Training and certification costs. •This is the core of innovation and the costs are foreseen by the project. •Waste disposal is 	<ul style="list-style-type: none"> •Grant beneficiary •Grant beneficiary •Grant beneficiary •Grant beneficiary •Grant beneficiary •Grant beneficiary •Grant beneficiary 	

	<p>pump installation.</p> <ul style="list-style-type: none"> •Manufacturing defects of embedded components. •Inadequate waste management can lead to pollution of the environment. •Inadequate installation can cause leakage of refrigerant. 	<p>flammable gases.</p> <ul style="list-style-type: none"> •Training and certification of workers. •Specification of propane manipulation procedures. •A leak detection and control system must be fitted that, when activated, will pump down the propane charge into a liquid receiver and then shut off the electrical supply to the heat pump. Separation of propane and electrical installations into two separate units (outer and inner), in order to avoid any possibility of electrical sparking near the propane installation. 	<p>foreseen by the company's annual plan.</p>		
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		<ul style="list-style-type: none"> •Choosing reliable and reputable suppliers. •The waste will be disposed of according to the prescribed procedures. •The equipment can only be installed by trained staff. 			
Operation	<ul style="list-style-type: none"> •In the event of device failure, self-correction by the user can cause danger. • • • 	<ul style="list-style-type: none"> •The device can only be serviced by an authorized service technician, even after the expiration of the warranty period. 		<ul style="list-style-type: none"> •Grant beneficiary. 	

*Items indicated to be the responsibility of the contractor shall be specified in the bid documents

II. MONITORING PLAN

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	When is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform monitoring?	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
Construction	<p>1)Reliability of propane supplier.</p> <p>2)The propane storage should be approved by the competent local authority.</p> <p>3)Qualifications of employees for working with propane.</p> <p>4)Safety requirements</p>	<p>1)Supplier reference list, certificates proving the performance of suppliers.</p> <p>2) The relevant supporting documentation.</p> <p>3)The relevant certificates.</p> <p>4)Monitoring of security procedures documents.</p> <p>5)In the</p>	<p>1)By collecting all relevant information about the supplier.</p> <p>2)By inspecting the relevant documentation.</p> <p>3)Inspection, collection and storage of employee's certificates.</p> <p>4)Inspection of security procedures</p>	<p>1)Prior to procurement.</p> <p>2)Before obtaining a usable license.</p> <p>3)Before starting work in the production facility.</p> <p>4)Continuously.</p> <p>5)At the end of device production.</p> <p>6)Prior to procurement.</p> <p>7)Continuously.</p> <p>8)After installation.</p>	<p>1)Do not exist.</p> <p>2)Small expenses.</p> <p>3)Small expenses.</p> <p>4)Do not exist.</p> <p>5)Costs are included in the production costs of the heat pump.</p> <p>6)Do not exist.</p> <p>7)Do not exist.</p> <p>8)Costs are included in the costs of the heat pump.</p>	<p>1)Grant beneficiary.</p> <p>2)Grant beneficiary.</p> <p>3)Grant beneficiary.</p> <p>4)Grant beneficiary.</p> <p>5)Grant beneficiary.</p> <p>6)Grant beneficiary.</p> <p>7)Grant beneficiary.</p> <p>8)Grant beneficiary.</p>	

	<p>for the use of propane in production facility.</p> <p>5) Leakage of propane.</p> <p>6) Quality of heat pump components.</p> <p>7) Adequate waste management</p> <p>8) Proper installation of the device.</p>	<p>production.</p> <p>6) Component technical specification and reliability of producer.</p> <p>7) At the production.</p> <p>8) On location.</p>	<p>monitoring documents.</p> <p>5) Pressure test.</p> <p>6) Control of suppliers.</p> <p>7) Daily supervision of waste disposal.</p> <p>8) Supervision and trial testing.</p>				
Operation	<p>1) Regular servicing.</p>	<p>1) On location.</p>	<p>1) Inspection of service book.</p>	<p>1) Once a year.</p>	<p>1) Costs are included in the costs of the heat pump.</p>	<p>1) Grant beneficiary.</p>	

Public Consultation Details and Minutes of Meeting for the Environmental Management Plan

Provide details on:

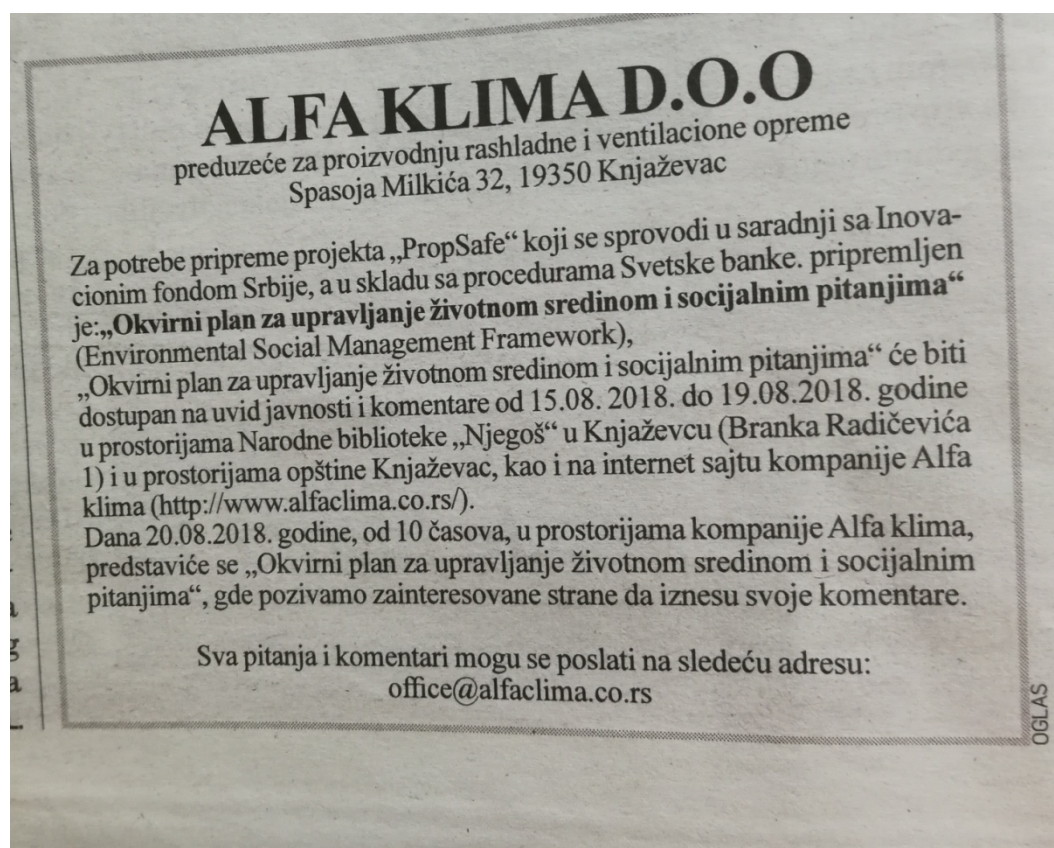
- Manner in which notification of the consultation was announced: media(s) used, date(s), description or copy of the announcement
- Date(s) consultation(s) was (were) held
- Location(s) consultation(s) was (were) held
- Who was specifically invited (Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office))

- List of Attendees (Name, organization or occupation, contact details)
- Meeting Agenda
- Summary Meeting Minutes (Comments, Questions and Response by Presenters)
- List of decisions reached, and any actions agreed upon with schedules and deadlines and responsibilities.

Public Consultation Details and Minutes of Meeting for the Environmental Management Plan

Public consultation for the Environmental Management Plan for project PropSafe was held at Alfa Klima d.o.o. facility in Knjaževac, Spasoja Milikića 32 on August 20th, 2018 from 10:00 to 13:00.

Public announcement was published in the daily "Srpski telegraf" on August 14, 2018.



Public announcement was also placed on the notice boards of the Municipality of Knjaževac and Knjaževac Public Library. Announcement and full text of the EMP were published on the company web site <http://www.alfaclima.co.rs/dok1.pdf>

Printed versions of the Environmental Management Plan were available for public viewing from August 15th, 2018 at the Municipality of Knjaževac and Knjaževac Public Library.

The following relevant actors were directly invited to participate in the public consultations:

#	Actor	Institution	e-mail
1	Savez mašinskih i	Društvo za KGH	office@smeits.rs

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Agenda for the meeting had three items:

1. New trends in the application of eco-friendly refrigerants
2. Presentation of EMP
3. Discussion and conclusions

Item 1. of the agenda was presented by Saša Jović, CEO of Alfa Klima. Global perspective on the need to replace ozone depleting gases with alternatives was presented. Three existing alternatives were outlined and the role of R290 alternative in PropSafe design explained.












Item 2. of the agenda was presented by dr Mile Veljović. Safety and environmental aspects of the PropSafe design were presented and detailed explanation of the items in the EMP were outlined.

Item 3. of the agenda was a discussion of the presented EMP. The participants had some suggestions for improving the EMP, which has been accepted and incorporated into the final version of the document. Following the discussion the final version was officially adopted.

Following is the sign sheet of those present at the public discussion:

književac 20.8.2018.

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