

ESL ENGLISH LESSON (60-120 mins) – 10th October 2010

The Great Hungarian Toxic Disaster

Hungary's recent toxic sludge spill is the country's worst ever environmental disaster. On the 4th October a reservoir holding deadly waste burst after heavy rains, releasing at least a million cubic metres of toxic red muddy water. It was like a mini tsunami and devastated three nearby villages. The Hungarian government immediately declared a state of emergency in three counties. Seven people were killed; 150 were injured, with hundreds suffering toxic burns. The deadly sludge came from an aluminium plant reservoir. The toxic muddy waste is a waste product from the refinement of bauxite to alumina, the material used to manufacture aluminium. The red mud contained an oxide that gave it a red colour. It also contained heavy metals, such as lead, that have a caustic affect on the skin and was slightly radioactive. The toxic water killed fish, and many other life forms. It made the immediate area look like the red planet Mars. The smell from the spill was also pretty bad.

The Hungarian army who were sent in to help wore special chemical protection outfits to protect themselves. Hungary activated the European Unions Civil Protection Mechanism for urgent international assistance so participating neighbouring EU countries sent help. The catastrophe was closely monitored by Hungary's neighbours and scientists. After four days the deadly sludge hit the Danube. While initially there had been huge concern about the sludge polluting it this fear was later downplayed. Emergency workers tried to contain as much of the sludge as possible but the sheer amount unleashed was similar to that of the Gulf of Mexico oil spill and that was pretty bad! The environmental disaster happened 100 miles west of the country's capital Budapest, near the town of Ajka. More than 250 people were evacuated from their homes. The breach in the toxic reservoir was quickly repaired and the flow from it stopped. Various fertilizers and plaster were used to counter the alkalinity. Villagers from the affected villages of Somlovasarhely, Devecser and Kolontar will probably never be able to return home. Update: One wall of the reservoir is strongly expected to collapse, unleashing yet more deadly toxic mud. One nearby village was evacuated. So who will pay for the massive clean up? Who is responsible and will they pay? A resulting dust cloud is said to be cancerous. Will the Danube be cleaned up? Is the water safe to drink?

EXERCISES

1. The Great Hungarian Toxic Disaster: Briefly, what three things do you know about the recent Hungarian toxic disaster? Go round the room swapping details.

2. Geography: Hungary: Where is Hungary? What is its capital? What countries surround it? Draw a map on the board then **look on Google maps** to help you.

3. Dictation: The teacher will read four to six lines of the article slowly and clearly. Students will write down what they hear. The teacher will repeat the passage slowly again. Self-correct your work from page one - filling in spaces and correcting mistakes. Be honest with yourself on the number of errors. Advise the teacher of your total number of errors. Less than five is very good. Ten is acceptable. Any more is room for improvement! More than twenty - you need to do some work!

4. Reading: The students should now read the article aloud, swapping readers every paragraph.

5. Vocabulary: Students should now look through the article and underline any vocabulary they do not know. Look in dictionaries. Discuss and help each other out. The teacher will go through and explain any unknown words or phrases.

6. The article: Students should look through the article with the teacher.

- a) What is the article about?
- b) What do you think about the article?
- c) What's the latest on this story?

7. Let's think! Think of five similar disasters. Then add five toxic chemicals. Write them below. Explain to your partner why you chose these. What do we learn from these disasters?

Five similar disasters	Five toxic chemicals
1	1
2	2
3	3
4	4
5	5

The teacher will choose some pairs to discuss their findings in front of the class.

8. Let's think! In pairs. On the board write as many words as you can to do with the '*The Great Hungarian toxic disaster'*. *One-two minutes.* Compare with other teams. Using your words compile a short dialogue together.

9. Let's discuss: The Great Hungarian toxic disaster: In pairs. Think of two positive and negative things you know about the situation. Compare and discuss together with your partner.

	Positive	Ne	egative
1		1	
2		2	

The teacher will choose some pairs to tell their stories in front of the class.

10. Let's talk! Radio Budapest: In pairs/groups. You are in the Radio Budapest studio. One of you is the presenter; the other student(s) is/are one the people in **exercise 12**.** Try to get a balanced interview. 5 minutes.

11. Let's do 'The Article Quiz': Have the students quiz each other in pairs. They score a point for each correct answer and half a point each time they have to look at the article for help. See who can get the highest score!

Student A

- 1) Name the villages.
- 2) How many people were killed?
- 3) How toxic is the mud?
- 4) What is the disaster similar to?
- 5) What planet is mentioned?

Student B

- 1) When was the disaster?
- 2) Where did the deadly sludge that was in the reservoir come from?
- 3) What did Hungary do?
- 4) Why did the reservoir dam burst?
- 5) What part of Hungary was the disaster?

12. ****** The Great Hungarian Toxic Disaster: In pairs/groups. Choose to be one of the following people involved in the great Hungarian toxic disaster. Create a short story about the situation. Tell it to your partner/group. Try to make it interesting! Students try to interlink or interact student storylines!

1	A villager whose house is affected	3	Owner of aluminium plant
2	The Prime Minister of Hungary	4	A journalist

The teacher will choose some pairs to tell their stories in front of the class.

13. Let's write an e-mail: Write and send a 200 word e-mail to your teacher about: The Great Hungarian Toxic Disaster. Your e-mail can be read out in class.

14. Sentence starters: Finish these sentence starters. Correct your mistakes. Compare what other people have written.

- a) The red mud ______
- b) Hungary _____
- c) The soldiers _____

DISCUSSION

Student A questions

- 1) Did the headline make you want to read the article?
- 2) Just how bad was this disaster?
- 3) Do you have any toxic reservoirs near you?
- 4) Is there a risk of cancer from the resulting red dust cloud?
- 5) What three bits of advice would give the Hungarian government?
- 6) What three bits of advice would you give the owners of the dangerous toxic reservoir?
- 7) What three bits of advice would you give to the villagers affected by the toxic sludge?
- 8) Why wasn't a second reservoir built to avoid this disaster? Is maximum profit for the owners a deciding point here?
- 9) Will the villagers get new homes, a new village etc...paid by the company responsible for the reservoir?
- 10) How strong are your feelings on the environmental impact this disaster has had and will continue to have on the landscape around and the spread of the toxic dust by wind power?

Student B questions

- 1) What do you think about what you read?
- 2) What three bits of advice would you give the rescuers?
- 3) What are the long term consequences in the area affected by the disaster?
- 4) If you had a house in a village affected by the toxic sludge what would you do?
- 5) What is the government doing to clean up the mess?
- 6) Just how bad is the environmental damage?
- 7) Will the river Danube and other feeder rivers recover?
- 8) Why doesn't the EU ban these toxic reservoirs?
- 9) Will the owners of the reservoir get away 'scott free' i.e. avoid any compensation?
- 10) Did you like this discussion?

SPEAKING

Let's debate! The Great Hungarian Toxic Disaster Allow 10-15 minutes – As a class / small groups / pairs / 1 to 1

The Great Hungarian Toxic Disaster

The teacher can moderate the session.

GAP FILL: READING:

Put the words into the gaps in the text.

The Great Hungarian Toxic Disaster

Mars

Hungary's recent (1) sludge spill is the country's worst ever environmental disaster. On the 4th October a reservoir waste holding deadly waste burst after heavy rains, releasing at least a million cubic metres of toxic red muddy water. It was like a mini oxide tsunami and devastated three nearby villages. The Hungarian government immediately declared a state of emergency in three spill counties. Seven people were killed; 150 were injured, with hundreds suffering toxic (2)____. The deadly (3)_____ came burns from an aluminium plant reservoir. The toxic muddy (4)_____ is a waste product from the refinement of bauxite to alumina, the sludge material used to manufacture aluminium. The red (5)_____ contained an (6)_____ that gave it a red colour. It also mud contained heavy metals, such as lead, that have a caustic affect on the skin and was slightly radioactive. The toxic water killed toxic fish, and many other life forms. It made the immediate area look like the red planet (7)_____. The smell from the (8)_____ was also pretty bad.

protection The Hungarian army who were sent in to help wore special chemical (1)_____ outfits to protect themselves. Hungary activated the European Unions Civil Protection Mechanism for urgent international assistance so participating neighbouring EU countries sent help. The (2)____ was closely (3)____ by Hungary's neighbours and scientists. After four days the deadly sludge (4)_____ the Danube. While (5)_____ there had been huge concern about the sludge polluting it this fear was later downplayed. Emergency workers tried to contain as much of the sludge as possible but the (6) _____ amount unleashed was similar to that of the Gulf of Mexico oil spill and that was pretty bad! The environmental disaster happened 100 miles west of the country's capital Budapest, near the town of Ajka. More than 250 people were evacuated from their homes. The (7)_____ in the toxic (8)_____ was quickly repaired and the flow from it stopped. Various fertilizers and plaster were used to counter the alkalinity.

catastrophe breach monitored hit

sheer

reservoir

initially

GAP FILL: LISTENING

Listen and fill in the spaces.

The Great Hungarian Toxic Disaster

Hungary's recent ______ is the country's worst ever environmental disaster. On the 4th October a reservoir holding deadly waste burst after heavy rains, releasing at least a million _____ red muddy water. It was like _____ devastated three nearby villages. The Hungarian government immediately declared a state of emergency in three counties. Seven people were killed; 150 were injured, with hundreds suffering toxic burns. The deadly sludge came from an aluminium plant reservoir. The ______ is a waste product from the refinement of bauxite to alumina, the material used to manufacture aluminium. The red mud contained an oxide that gave it a red colour. It also contained heavy metals, such as lead, that have a caustic affect on the skin and was slightly radioactive. The _____ fish, and many other life forms. It made the immediate area look like the red planet Mars. The smell from the spill _____ The Hungarian army who were wore special chemical protection outfits to protect themselves. Hungary activated the European Unions Civil Protection Mechanism for urgent international assistance so participating neighbouring EU countries sent help. The catastrophe was closely monitored by Hungary's neighbours and scientists. After four days ______ the Danube. While initially there had been huge concern about the sludge polluting it this fear was later downplayed. Emergency workers tried to contain as _____ as possible but the sheer amount unleashed was similar to that of the Gulf of Mexico oil spill and _____! The environmental disaster happened 100 miles west of the country's capital Budapest, near the town of Ajka. More than 250 people were evacuated from their homes. The breach in the toxic reservoir was ______ the flow from it stopped. Various fertilizers and plaster were used to counter the alkalinity. Villagers from the affected villages of Somlovasarhely, Devecser and Kolontar will probably never be ______.

GRAMMAR

Put the words into the gaps in the text.

The Great Hungarian Toxic Disaster

Hungary's recent toxic sludge spill is the country's worst ever environmental disaster. On the 4th October a reservoir holding that deadly waste burst (1)___ heavy rains, releasing at least a million cubic metres of toxic red muddy water. It was like a mini tsunami many and devastated three nearby villages. The Hungarian government immediately declared a state of emergency in three counties. with Seven people were killed; 150 were injured, (2)___ hundreds suffering toxic burns. The deadly sludge came (3)____ after aluminium plant reservoir. The toxic muddy waste is a waste product from the refinement of bauxite to alumina, the material from used to manufacture aluminium. The red mud contained an oxide that gave it a red colour. It also contained heavy metals, (4) such as lead, (5) have a caustic affect on the skin and was slightly radioactive. The toxic water killed fish, and (6)___ (7)___ life forms. also It made the immediate area look like the red planet Mars. The smell from the spill was (8)__ pretty bad.

The Hungarian army who were sent in to help wore special chemical protection outfits to protect themselves. Hungary activated the European Unions Civil Protection Mechanism (1)___ urgent international assistance (2)___ participating neighbouring EU countries sent help. The catastrophe was closely monitored by Hungary's neighbours and scientists. After four days the deadly sludge hit the Danube. While initially there had been huge concern about the sludge polluting it this fear was later downplayed. Emergency workers tried to contain as much of the sludge (3) possible (4) the sheer amount unleashed was similar to that (5)__ the Gulf of Mexico oil spill (6)__ that was pretty bad! The environmental disaster happened 100 miles west of the country's capital Budapest, near the town of Ajka. More than 250 people were evacuated from their homes. The breach in (7) toxic reservoir was quickly repaired and the flow from (8) stopped. Various fertilizers and plaster were used to counter the alkalinity. Villagers from the affected villages of Somlovasarhely, Devecser and Kolontar will probably never be able to return home.

Find this and similar lessons at http://www.NewsFlashEnglish.com

other

but

SO

for

as

of

it

and

the

SPELLING TEST

The teacher will ask the class individually to spell the following words that are in the article. Afterwards, check your answers with your teacher, using the following ratings: **Pass = 12, Good = 15, Very good = 18, Excellent = 20**

1	environmental	11	immediately
2	neighbours	12	emergency
3	themselves	13	toxic
4	sludge	14	oxide
5	tsunami	15	participating
6	aluminium	16	alkalinity
7	Hungarian	17	unleashed
8	reservoir	18	evacuated
9	radioactive	19	responsible
10	initially	20	fertilizers

LINKS

http://www.bbc.co.uk/news/world-europe-11506713 http://edition.cnn.com/2010/WORLD/europe/10/09/hungary.toxic/index.html http://www.telegraph.co.uk/news/worldnews/europe/hungary/8052160/Hungary s-toxic-flood-could-turn-into-a-cancerous-cloud.html http://www.dailymail.co.uk/news/article-1318869/Hungarians-urged-flee-country-

http://www.dailymail.co.uk/news/article-1318869/Hungarians-urged-flee-countryfear-grows-toxic-cloud-death-toll-continues-rise.html

http://www.xpatloop.com/news/red_sludge_reaches_danube_in_hungary http://www.bbj.hu/?col=1086&id=54468

ANSWERS

GAP FILL: The Great Hungarian Toxic Disaster: Hungary's recent toxic sludge spill is the country's worst ever environmental disaster. On the 4th October a reservoir holding deadly waste burst after heavy rains, releasing at least a million cubic metres of toxic red muddy water. It was like a mini tsunami and devastated three nearby villages. The Hungarian government immediately declared a state of emergency in three counties. Seven people were killed; 150 were injured, with hundreds suffering toxic **burns**. The deadly **sludge** came from an aluminium plant reservoir. The toxic muddy **waste** is a waste product from the refinement of bauxite to alumina, the material used to manufacture aluminium. The red **mud** contained an **oxide** that gave it a red colour. It also contained heavy metals, such as lead, that have a caustic affect on the skin and was slightly radioactive. The toxic water killed fish, and many other life forms. It made the immediate area look like the red planet **Mars**. The smell from the **spill** was also pretty bad.

The Hungarian army who were sent in to help wore special chemical **protection** outfits to protect themselves. Hungary activated the European Unions Civil Protection Mechanism for urgent international assistance so participating neighbouring EU countries sent help. The **catastrophe** was closely **monitored** by Hungary's neighbours and scientists. After four days the deadly sludge **hit** the Danube. While **initially** there had been huge concern about the sludge polluting it this fear was later downplayed. Emergency workers tried to contain as much of the sludge as possible but the **sheer** amount unleashed was similar to that of the Gulf of Mexico oil spill and that was pretty bad! The environmental disaster happened 100 miles west of the country's capital Budapest, near the town of Ajka. More than 250 people were evacuated from their homes. The **breach** in the toxic **reservoir** was quickly repaired and the flow from it stopped. Various fertilizers and plaster were used to counter the alkalinity. **(V2)**



Created by David Robinson. This ESL lesson is the copyright of www.newsflashenglish.com